89-843

No. ———

Supreme Court, U.S.
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IN THE

Supreme Court of the United States

OCTOBER TERM, 1989

AMERICAN CYANAMID COMPANY

and

ROHM & HAAS COMPANY,

Petitioners,

v.

JAMES E. O'NEIL, in his capacity as Attorney General for the State of Rhode Island,

Respondent.

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

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QUESTIONS PRESENTED

1. May a court hold *de minimis* parties jointly and severally liable under the Superfund law for all outstanding response costs, contrary to the intent of Congress and the law expressed in other circuits, especially where the injury was divisible and subject to apportionment?

2. May the burden of proof be shifted to defendants in a Superfund case, given that the statute does not provide for such a shift, particularly where the Government has key facts peculiarly within its control?

3. Did the court below err in adopting a *per se* rule, applicable to this and all other Superfund cases, that groundwater contamination is an indivisible harm warranting the imposition of joint and several liability upon those found to have contributed to the contamination?

4. Does it violate the *Ex Post Facto* and Due Process Clauses of the United States Constitution to impose Superfund liability—and in particular, pre-enactment costs —retroactively?

PARTIES TO THE PROCEEDINGS

Petitioners and defendants-appellants below are American Cyanamid Company and Rohm & Haas Company. A listing of petitioners' respective corporate subsidiaries and affiliates is set forth in the appendix hereto at 77a-79a, pursuant to Supreme Court Rule 28.1. Respondent and plaintiff-appellee below is James E. O'Neil, in his capacity as Attorney General for the State of Rhode Island.

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PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

Petitioners American Cyanamid Company and Rohm & Haas Company respectfully pray that a writ of certiorari issue to review the judgment and opinion of the United States Court of Appeals for the First Circuit, entered in the above-entitled proceeding on August 21, 1989.

OPINIONS BELOW

The opinion of the Court of Appeals for the First Circuit is reported at 883 F.2d 176, and reprinted in the appendix hereto ("App.") at 1a-15a.

The opinion of the District Court for the District of Rhode Island (Pettine, J.) is reported at 682 F. Supp. 706, and is reprinted at App. 16a-67a.

JURISDICTION

Respondent brought suit in the District Court of Rhode Island, invoking the jurisdictional provisions in the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9613, commonly referred to as the Superfund law.

Petitioners timely appealed from the District Court's March 8, 1988 decision pursuant to 28 U.S.C. § 1291, and the Court of Appeals affirmed on August 21, 1989. App. 1a-15a.

The jurisdiction of this Court to review the judgment of the First Circuit is invoked under 28 U.S.C. § 1254(1).

PERTINENT STATUTORY AND CONSTITUTIONAL PROVISIONS

Sections 107(a) & (b) and 113(f) of CERCLA, 42 U.S.C. §§ 9607(a) & (b), 9613(f), are relevant to this case. The pertinent texts of these provisions, as well as the *Ex Post Facto* and Due Process Clauses of the United States Constitution, are set forth at App. 72a-78a.

STATEMENT OF THE CASE

The Picillo family owned property in Coventry, Rhode Island that was once used as a pig farm. In July of 1977, the Picillos entered into a contract with three members of the Capuano family whereby the Picillos illegally accepted hazardous wastes for burial on their property at a price of $1 per barrel. The property thus became a classic "midnight dump" site. Under this agreement, a total of 20,000 to 25,000 55-gallon drums of waste plus the contents of 18 tank trucks were disposed of in pits or trenches on the property during the summer of 1977.

No records of the waste haulers using the site were kept. However, one transporter, SCP, hauled at least 6800 drums to the site from New Jersey. As was stipulated below (App. 69a-71a), none of the wastes transported to the site by SCP originated at the facilities of petitioners, Rohm & Haas Company and American Cyanamid Company. The illegal dumping ended in September of 1977 pursuant to an order of the State Fire Marshal, following a blaze in one of the disposal trenches.

Petitioners are chemical manufacturers, and operate research facilities in the northeastern United States. During 1977, petitioners followed careful procedures for the proper disposition of wastes generated at their facilities. They used only licensed transporters and instructed them to send materials only to permitted landfill facilities (none of which was in Rhode Island) specified in the hauling contracts. Indeed, the District Court found that Rohm & Haas "took every precaution in the disposal of its waste," App. 44a, and that American Cyanamid was diligent in packaging and labelling its wastes and in selecting transporters to carry them away. App. 49a.

Neither Rohm & Haas nor American Cyanamid consigned any waste materials from their research facilities to the Picillo property for disposal, either directly or indirectly. Neither had any idea that its waste was being illegally diverted from its intended destination. Both companies first learned that wastes from their research facilities had been disposed of at the Picillo property when those materials were discovered during the cleanup of the site.

That cleanup began in June of 1979 under the direction of the State of Rhode Island, and occurred in four phases. Phase 0 consisted of initial cleanup activities; Phase I addressed remediation of a trench in the northeastern part of the property in 1980; Phase II focused on the northwest trench in 1981; and Phase III involved the

west and south trenches in 1982. The State spent a total of $1,613,427.30 in connection with the remediation activities.[1]

When the Picillo site closed, approximately 3,000 empty drums were stockpiled there, apparently for recycling. During the course of the cleanup, the State and EPA contractors discovered and removed a total of approximately 10,300 buried drums. Other than to determine whether the liquid wastes in some drums were compatable for mixing, the State performed no chemical analysis of the substances removed during the cleanup, so that the toxicity, if any, of the wastes excavated is unknown.[2]

Recordkeeping during the State's cleanup activity was either non-existent or deficient. For example, no records were kept as to the markings, if any, on the 3,000 empty

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[1] The United States Environmental Protection Agency ("EPA") became involved in the cleanup of the site during Phases II and III, and also expended funds in connection with those two phases of the remediation effort. EPA is not a party to this litigation, but recently has filed a separate action against petitioners. *See* page 12, *infra*.

[2] The State's cleanup effort at the site was marred by numerous mishaps, particularly in Phase I. For example, the Phase I contractor, Jet-Line, failed to use barrel grapplers to remove drums, and instead relied on primitive techniques such as backhoes, earth moving equipment, and dragging drums from the pits with metal chains. This approach to cleanup, which the State acknowledged was "crude," "not a state-of-the-art type of operation," and a "major deficiency," resulted in many drums being crushed or punctured during removal, so that their contents were spilled onto the ground. This problem may have been exacerbated by Jet-Line's contract, which called for payment on a per-drum basis, so that the contractor had an incentive to remove drums quickly rather than prudently. The state of affairs caused by Jet-Line's activities became so bad that an EPA contractor labelled the cleanup methodology for Phase I as extremely unsafe and potentially hazardous. *See generally* Stenographic Transcript of Trial ("Trial Transcript"), *O'Neil* v. *Picillo*, C.A. No. 83-0787P (D.R.I.) at 87-89, 101-102 (testimony of John Leo).

drums found at the site. Similarly, the State failed to keep any records regarding which waste generators' drums were discovered during Phase I. A State employee, John Leo, grew concerned that the failure to keep records meant that the government was literally throwing away evidence against potential waste generators. Leo therefore began to record certain information from labels or other markings on containers excavated during Phases II and III. This attempt at recordkeeping, however, proved to be incomplete as well.

The State notified American Cyanamid in 1981 that two or three drums that apparently had originated at American Cyanamid facilities had been found. American Cyanamid fully cooperated with the State following this notification, and confirmed that the drums in question probably originated at the company's facilities. Altogether, as the District Court concluded, a total of 10 drums from American Cyanamid were discovered at the site. App. 49a.

In June of 1982, during Phase III of the cleanup, the State advised Rohm & Haas that materials from one of the company's research laboratories had been uncovered at the Picillo farm. The company promptly dispatched two employees to the site for two weeks to assist the State in identifying Rohm & Haas materials. Altogether, the District Court concluded that 303 5-gallon pails and 49 55-gallon drums of the waste at the site, the equivalent of 76 drums, were attributable to Rohm & Haas. App. 44a.

At its own expense of approximately $32,000, Rohm & Haas arranged for the removal of all its materials uncovered at the site and, literally as a favor to the State, even removed some materials generated by another company as well as materials of the State's contractor. Trial Transcript at 866-867 (testimony of Joseph I. Pawlikowski). Throughout the investigation of the site, Rohm &

Haas fully cooperated with the State, and Leo credited the company with playing "a very important part" in identifying wastes at the site. *Id.* at 52-53 (testimony of John Leo).

Thus, American Cyanamid's and Rohm & Haas' *combined* contribution to the wastes found at the site amounted to the equivalent of 86 55-gallon drums. Assuming, conservatively, that a maximum of 20,000 55-gallon drums were deposited at the site, petitioners' *combined* percentage share of the site's wastes amounted to less than 0.5% of the total. American Cyanamid's share alone was only 0.05% of the total.

Invoking CERCLA, the State commenced litigation in 1983 against numerous defendants, including Rohm & Haas and American Cyanamid. The litigation sought to obtain reimbursement for funds already expended by the State, and declaratory relief requiring the defendants to pay for additional remediation activities at the site. The defendants in this litigation constituted only some of the generators whose waste was discovered. Ironically, while companies such as American Cyanamid and Rohm & Haas who cooperated with the State during its investigation were sued, companies who were uncooperative were not sued.[3] Petitioners sought to remedy this deficiency by moving to add additional waste generators to the litigation as third-party defendants. The State, however, objected to this motion, and the District Court sustained the objection. App. 60a.[4]

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[3] The State's decision not to sue one generator, M & T Chemicals, Inc., is a case in point. When the State contacted M & T about materials apparently from M & T which were found at the site, M & T told the State, in the words of a state employee, "to go fly a kite." *See* Trial Transcript at 461-467 (testimony of John Leo). This uncooperative position was later rewarded when the State opted not to sue M & T Chemicals.

[4] As a result, petitioners were compelled to file a separate lawsuit against these additional generators. *See American Cyanamid Co., et al.* v. *King Indus., et al.*, C.A. No. 87-0110 (D.R.I. 1988)

Prior to trial, the State settled with a number of the defendants for approximately $2.3 million, plus an agreement by them to undertake soil removal activities at the site. EPA also participated in these settlements, the cash proceeds of which were allocated between EPA and the State on a 3-to-1 basis. Several of the generators who settled were not *de minimis* parties, but instead were major customers of SCP who had a relatively large number of drums transported to the site. *See* App. 69a-71a. In addition, the Capuanos, who masterminded use of the property for illegal dumping, settled; they contributed $2 million of the $2.3 million in payments.

Following these settlements, the State pursued litigation against five defendants for its claim of $1.6 million in past response costs, plus interest—*i.e.*, roughly the same amount as the Capuanos paid. Yet all of these remaining defendants, including petitioners, had only *de minimis* connections with the site, in that the State's records attributed to them only a small handful of the 20,000 to 25,000 55-gallon drums disposed of.

Following trial, the District Court held Rohm & Haas, American Cyanamid and a third defendant, Hydron Laboratories, Inc., jointly and severally liable for $991,937.30 in past state response costs, plus interest, as well as *all* future response costs. App. 67a.[5] As noted earlier, the court attributed 10 55-gallon drums to American Cyanamid and 49 drums and 303 5-gallon pails to

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[5] The trial court arrived at the $991,937.30 figure by reducing the State's original claim of $1,613,437.30 by $621,500, which represented the State's portion of the cash settlements arrived at with other defendants.

Hydron, which the District Court found liable for 21 drums worth of waste materials, subsequently reached a settlement with the State and EPA for $92,400. The District Court found the other two defendants not liable because the State had failed to show that their waste materials were hazardous within the meaning of CERCLA.

Rohm & Haas. But the court made no finding as to the total volume of waste deposited at the site, and therefore did not address the issue of what fraction of the wastes at the site were contributed by petitioners. Instead, the court imposed joint and several liability on petitioners without deciding that question.[6]

The Court of Appeals affirmed. Although it determined that "Congress did not intend for joint and several liability to be imposed without exception" in CERCLA cases, App. 10a, the court nevertheless upheld application of the doctrine in this case. It reached this result by concluding that petitioners had failed to meet their burden of demonstrating the divisibility of the harm, and, "where all of the contributing causes cannot fairly be traced, Congress intended for those proven at least partially culpable to bear the cost of the uncertainty." App. 5a. Hence, the court failed to address the small proportion of the waste contributed by petitioners.

The First Circuit found that the potential harshness of its decision was mitigated by two statutory provisions. The court relied on the 1986 amendments to CERCLA, which direct the government to offer early settlements to *de minimis* parties. App. 5a (citing 42 U.S.C. § 9622 (g)). The court also relied on the fact that the same amendments provide a statutory cause of action for contribution, which allows companies found liable for CERCLA cleanup costs in amounts disproportionate to their actual contributions to the site to obtain relief from other responsible parties. App. 6a (citing 42 U.S.C. § 9613).

With respect to future costs at the site, which involve possible remediation of groundwater contamination, petitioners contended that no finding of liability was appro-

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[6] In reaching its decision, the District Court rejected, among other things, petitioners' claim that the retroactive application of CERCLA violates the United States Constitution. App. 63a.

priate, since there was no evidence that the groundwater is—or ever will be—contaminated. The Court of Appeals brushed this analysis aside, however, opining that "[w]e think it likely that the harm to the water will be indivisible, and therefore, that [petitioners] could properly be held jointly and severally liable for the costs of this remedial action." App. 8a. Hence, the Court of Appeals held petitioners liable for all such future response costs, whatever they may turn out to be. *Id.*

Finally, the court summarily affirmed the District Court's previous rejection of petitioners' other arguments, including the challenge to the retroactive application of CERCLA, which the Court of Appeals dispensed with in a footnote. App. 14a n.12.

REASONS FOR GRANTING THE WRIT

I. The Questions Raised by the Decision Below Are Important and Recurring Problems Under CERCLA

The decision below is of extraordinary importance, coming as it does in the middle of an explosion of Superfund litigation. It raises the issue of the extremes to which the government may go in seeking to impose liability under CERCLA, since here parties with very minor connections with the Picillo site have been saddled with major liabilities.

The impact of the Court of Appeals' decision to impose joint and several liability even on *de minimis* parties is not limited to the particular facts of this case, but extends to countless cases currently or prospectively pending in federal court. For it is virtually certain that Superfund actions will account for increasingly large portions of the federal courts' dockets over the years to come: the General Accounting Office has estimated that there are over 425,000 potential Superfund sites around the country.[7]

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[7] *See* GAO, "Superfund: Extent of the Nation's Potential Hazardous Waste Problem Still Unknown," Report No. GAO/RCED-

The stakes in each Superfund case are enormous. In EPA's most recent analysis, the Agency has calculated that the *average* cost of cleaning up a Superfund site currently is approximately $19 million. *See* 54 Fed. Reg. at 41024. This estimate is decidedly low; Superfund cleanup costs can run into the hundreds of millions of dollars at a site; some even exceed $1 billion.[8] Hence, the harsh inequities that flow from holding *de minimis* parties jointly and severally liable for Superfund cleanup costs, as occurred in this case, will only grow over time. The decision below, which otherwise will guide the growing volume of CERCLA litigation, should be corrected by this Court to avert such an outcome.

* * *

The harshness of the Court of Appeals' decision may not be apparent from a quick reading. The court held, however, that two parties who contributed a minuscule portion of the waste at the Picillo site are jointly and severally liable for past costs and *all* future costs, despite the fact that there was a "rough justice" alternative for apportionment of the harm. The court reached this outcome because those two *de minimis* parties could not meet the virtually impossible burden of accounting for the dis-

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88-44 (Dec. 1987). To date, over 900 hazardous waste sites have been formally designated for cleanup by EPA. *See* 54 Fed. Reg. 41015, 41025-37 (October 4, 1989) (EPA's most recent update of the National Priorities List of Superfund sites). The parties involved in each and every one of these cases will, in due course, have their liabilities resolved in the federal courts, either through litigation or the approval of consent decrees. *See* 42 U.S.C. §§ 9613, 9622.

[8] It should be noted that the Office of Technology Assessment calculates that over 4,000 sites may be on the National Priorities List by the year 2000, and that total costs of cleanup could run in the range of $500 billion over the next 50 years. *See generally* OTA, "Coming Clean: Superfund Problems Can Be Solved . . ." at 27, 85 (October 1989). These figures, taken together, translate into an average cleanup cost of approximately $125 million per site—several times EPA's estimate.

position of all their waste after they had arranged for its proper disposal by licensed contractors—a burden which the statute does not impose on defendants in CERCLA cases. Furthermore, the court imposed what amounts to a *per se* rule of joint and several liability as to groundwater contamination in every case. The court's decision also mandates the imposition of Superfund obligations retroactively—including for pre-enactment costs—even though nothing in the Act sanctions such a result. These rulings, which we address separately below, are indefensible and have enormous implications in the area of hazardous waste remediation under Superfund. This Court should grant certiorari to ensure that CERCLA is applied in a way that is faithful to Congress' intent, is fair to all future parties, and does not violate constitutional principles.

II. The Decision Below Improperly Imposes Joint and Several Liability on *De Minimis* Parties, in Conflict with Congressional Intent and Case Law Precedent

The central mistake of the court below was its failure to recognize that this case presents precisely the kind of situation to which Congress did *not* intend joint and several liability to apply in CERCLA actions: a case in which parties whose waste contribution amounted to only a minuscule percentage of the total have been forced to shoulder all outstanding remedial costs. This error is compounded by the fact that CERCLA actions have been held to be proceedings in which what the parties "seek is essentially restitution, which is an equitable remedy." *United States* v. *Mottolo*, 695 F. Supp. 615, 626-627 (D.N.H. 1988). It is fundamental, of course, that in equitable actions such as this case, there must be basic fairness to the parties—fairness that is lacking here. Thus, the decision below violates *both* Congress' intent and basic equity.

The extent to which the outcome below runs astray of the statute and equity is illustrated by the facts. It is

uncontested on the record that a *minimum* of 20,000 55-gallon drums of waste materials were disposed of at the Picillo farm. The entire amount of wastes which the State attributed to the petitioners amounted, collectively, only to the equivalent of 86 drums. This means that the petitioners' *combined* waste volume amounted to less than *0.5%* of the total volume.

By any rational standard, therefore, petitioners qualify as *de minimis* contributors to the Picillo site.[9] Yet the effect of the decision below is to impose upon them well over 50% of the State's past response costs—plus all future costs. Moreover, the United States has recently exacerbated the unfairness visited upon petitioners by suing them—but no other parties connected with the site—to recover $3.5 million of EPA's past costs. *See United States* v. *American Cyanamid Co. and Rohm & Haas Co.*, C.A. No. 89-0565 (D.R.I., filed Oct. 16, 1989). Petitioners' total exposure at this site has therefore ballooned to approximately $5 million—all for 86 drums out of over 20,000.

This highly inequitable result is contrary to Congress' intent. CERCLA's legislative history on the question of measuring liability, while limited, makes clear that Congress was troubled by the potentially harsh and unfair effects of joint and several liability. Accordingly, Congress refused to adopt a *per se* rule applying the doctrine, lest *de minimis* parties such as petitioners be unfairly penalized under the statute.

During Congress' initial consideration of CERCLA in 1980, the compromise version of the statute that Congress

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[9] It is common in Superfund cases to define *de minimis* parties as those responsible for less than 1% of the site's wastes. One court recently upheld the reasonableness of such a 1%-cutoff. *See United States* v. *Cannons Eng'g Corp.*, C.A. No. 88-1786 WF (D. Mass. Aug. 14, 1989), slip op. at 38, 40. Here, even if petitioners' volumetric shares were doubled, they would still qualify as *de minimis* parties for the Picillo site under this standard.

ultimately enacted into law *deleted* earlier references in Section 107 that had expressly embraced the concept of joint and several liability. *See* 126 Cong. Rec. 30932 (1980) (statement of Sen. Randolph regarding the deletion of joint and several liability as a part of the overall compromise allowing enactment of CERCLA). The courts called upon to assess the availability of joint and several liability under CERCLA have uniformly determined that Congress' removal of any reference to the doctrine means that "the term was omitted in order to have the scope of liability determined under common law principles, where a Court performing a case by case evaluation of the complex factual scenarios associated with multiple-generator waste sites will access the propriety of applying joint and several liability on an individual basis." [10]

Congressman Gore, a leading sponsor of the Act, articulated Congress' expectation that small-volume generators would not be subject to joint and several liability, as follows:

> One concern expressed about the imposing [of] joint and several liability for cleanup of hazardous waste sites is that a one-barrel dumper may be held liable for millions of dollars in damages. Such concern is completely unfounded * * *
>
> For a defendant to be held liable for full damages under joint and several liability * * * the particular defendants' actions must also have been a *substantial factor* in bringing about the damage. [126 Cong. Rec. 24341 (1980) (emphasis added).]

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[10] *United States* v. *Chem-Dyne Corp.*, 572 F. Supp. 802, 808 (S.D. Ohio 1983). *See also United States* v. *Conservation Chemical Co.*, 589 F. Supp. 59, 63 (W.D. Mo. 1984) ("the term was omitted in order to have the scope of liability determined by the Court on a case-by-case evaluation"); *United States* v. *Wade*, 577 F. Supp. 1326, 1339 (E.D. Pa. 1983) (deletion of references to joint and several liability "helps to ameliorate the harshness of the liability provisions of the statute").

Thus, from the outset Congress intended that joint and several liability would *not* apply across the board under CERCLA, and that only defendants who had a "substantial" relationship in bringing about the damage would be potentially subject to that liability standard.

Congress reemphasized its concern over the inequities of joint and several liability under CERCLA during consideration of the 1986 amendments to the Act (the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1613 (1986)). Representatives from both EPA and the Department of Justice assured Congress that joint and several liability would *not* apply to *de minimis* parties, as the following exchange illustrates:

> The Chairman: [T]he critics of joint and several liability contend that Government could sue the generator for a single drum of waste found at a massive site for the entire cleanup. While this has not yet occurred in practice, do you dispute that CERCLA allows for such enforcement?
>
> [EPA Administrator Lee M.] Thomas: Senator, I think in theory, that would be allowed, but, clearly, in practice it is not done. I do not think that it would be done. *I do not think even if we tried to do it, the courts would allow us to do it.*
>
> The Chairman: Now, it is correct, then, that it is only the Government's prosecutorial discretion that restrains it from suing the one drum generator?
>
> [Assistant Attorney General F. Henry] Habicht: Mr. Chairman, if I might respond to that, I think it is fair to say it is a bit more than prosecutorial discretion. We are concerned that *if we apply joint and several liability in that kind of extreme situation, a Court may very well find that it is not applicable in that sort of situation.*
>
> There may be a number of reasons for such a result. Congress indicated in the legislative history in 1980

> that joint and several liability was deleted expressly from the statute because it should be left to the courts to deal with on a case-by-case basis so that it would not be oppressively or unfairly applied in inappropriate circumstances.
>
> So I think it more than just prosecutorial discretion • • • I would hope and expect that all prosecutors will take guidance from Congress that joint and several liability should not be abused. [Superfund Improvement Act of 1985: Hearings on S.51 Before the Committee on the Judiciary, 99th Cong., 1st Sess. 71 (1985) (emphasis added).[11]]

The courts, too, have been troubled by the unfairness of applying the joint and several liability doctrine to *de minimis* parties. As one court put it, "both houses of Congress were concerned about the issue of fairness, and joint and several liability is extremely harsh and unfair if it is imposed on the defendant who contributed only a small amount of waste to a site." *United States* v. *A & F Materials Co., Inc.*, 578 F. Supp. 1249, 1256 (S.D. Ill. 1984).[12] Thus, the settled rule, at least until the decision below, had been that joint and several liability should apply only on a case-by-case basis,[13] and should not be imposed "where it would produce inequitable results."

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[11] *See also* Insurance Issues and Superfund, Hearing before the Committee on Environment and Public Works, 99th Cong., 1st Sess. 13 (April 3, 1985) (Assistant Attorney General Habicht advises the Senate that "we have not and don't intend to and I don't think we can impose liability for 100% of the costs on a *de minimis* contributor").

[12] *Accord United States* v. *Wade*, 577 F. Supp. at 1341.

[13] "In each case, the court must consider traditional and evolving principles of federal common law, which Congress has left to the courts to supply interstitially." *United States* v. *Monsanto Co.*, 858 F.2d 160, 171 (4th Cir. 1988), *cert. denied*, 109 S. Ct. 3156 (1989). *Accord, e.g., United States* v. *Miami Drum Services, Inc.*, 25 E.R.C. 1469, 1472 (S.D. Fla. 1986); *United States* v. *Conservation Chemical Co.*, 619 F. Supp. 162, 223-230 (W.D. Mo. 1985).

New York v. *Shore Realty Corp.*, 21 E.R.C. 1430, 1431-32 (E.D.N.Y. 1984).[14]

If permitted to stand, the imposition of liability on petitioners in the manner sanctioned by the courts below would vitiate Congress' stated concerns about imposing joint and several liability on *de minimis* parties, since if such liability applies on *this* record, it is difficult to conceive of a case in which it would not apply. The Court of Appeals, in short, undid the compromise Congress struck when it enacted CERCLA and effectively has read back into the statute that which Congress deliberately took out: a *per se* rule that joint and several liability will, for all practical purposes, be applied in *every* CERCLA case. This Court should correct this judicial contravention of legislative intent and action.[15]

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[14] *Accord, e.g., United States* v. *Bliss*, 667 F. Supp. 1298, 1312-13 (E.D. Mo. 1987); *United States* v. *Miami Drum Services, Inc.*, 25 E.R.C. 1469, 1474 (S.D. Fla. 1986) (deletion of specific references to joint and several liability in drafts of the CERCLA legislation "indicated an intent [by Congress] to avoid its mandatory imposition in cases where the result would be inequitable"); *United States* v. *Hardage*, 26 E.R.C. 1049 (W.D. Okla. 1987); *Idaho* v. *Bunker Hill Co.*, 635 F. Supp. 665, 676-677 (D. Idaho 1986); *United States* v. *Stringfellow*, 20 E.R.C. 1905 (C.D. Cal. 1984); *United States* v. *A & F Materials*, 578 F. Supp. 1249, 1256 (S.D. Ill. 1984) ("The Senate expressed its sensitivity to the fairness issue by rejecting a mandatory legislative standard in lieu of allowing the Courts to impose joint and several liability on a case by case basis"); *United States* v. *Chem-Dyne Corp.*, 572 F. Supp. 802, 808 (S.D. Ohio 1983) (Congress deleted use of joint and several liability "to avoid a mandatory legislative standard applicable in all situations which might produce inequitable results in some cases").

[15] Nor can the outcome below be justified as an appropriate step in the evolution of federal common law on joint and several liability under CERCLA. In developing that common law, the courts—including the Court of Appeals below, App. 4a—have relied upon the Restatement (Second) of Torts for guidance in developing jurisprudential principles to apply under the statute. The Restatement expressly provides that in litigation the *plaintiff* has the burden of showing "that it is more likely than not that the conduct

The unfairness of the result below is shown by two assumptions the court made about the purported limits of the decision's impact, neither of which is valid. First, the court asserted that any unfairness to petitioners would be mitigated by their ability to seek contribution from other liable parties, pursuant to Section 113(f)(1) of CERCLA, 42 U.S.C. § 9613(f)(1). App. 6a. But this analysis missed the point. Because Congress never intended *de minimis* parties to be saddled with joint and several liability in the first place, it certainly never intended to place the burden of initiating a private contribution action on such parties. Forcing the parties with the least connection to a Superfund site to bear the expense of pursuing contribution from parties the government chose not to sue (and, in some instances, as in this case, went so far as to prevent from being named as third-party defendants in the initial litigation) stands CERCLA on its head and increases the unfair impact of the decision below.

Moreover, the court overlooked the fact that the statute elsewhere *bars* contribution actions against parties who have entered into settlements with the government for matters covered in those settlements. *See* CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2). This hardly guarantees that the grossly disproportionate obligations imposed upon petitioners by the decision below will be alleviated through subsequent contribution actions, as anticipated by the Court of Appeals.

Second, the court below cited Section 122(g) of CERCLA, 42 U.S.C. § 9622(g), as a mitigating factor.

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of the defendant was a *substantial factor* in bringing about the harm." Restatement (Second) of Torts § 433B, comment a (emphasis added). The State cannot credibly claim that parties who collectively contributed less than 0.5% of the waste materials at a site were "substantial factors" in that site's environmental problems; yet that conclusion is necessarily implicit in the decision below. *See also* page 13 *supra* (statement of Rep. Gore).

This provision authorizes special settlements for *de minimis* parties, and the court asserted in a footnote that the petitioners "apparently were offered settlements, but chose instead to try this case." App. 5a n.3. This understanding by the Court of Appeals is incorrect and has no support in the record: *at no time has the government offered petitioners the opportunity to settle their liabilities in this case as de minimis parties* under Section 122(g). Hence, this purported mitigating factor is of no moment, and the harsh impact of the decision below stands unrelieved.

III. The Decision Below Improperly Held that Petitioners Have the Burden of Showing Apportionability, and that Groundwater Contamination Is Not Apportionable

Wholly apart from the Court of Appeals' failure to recognize the limits of the applicability of joint and several liability under CERCLA, the decision below rests on a second fundamental error: the conclusion that joint and several liability is *applicable at all* in this case. Such liability applies only when the harm involved is indivisible and not capable of apportionment. The Court of Appeals concluded that joint and several liability was appropriate in this case because petitioners had failed to show that the Picillo site's costs were capable of apportionment. App. 12a-13a.

This conclusion was incorrect. As petitioners showed the court, the record provides ample basis for calculating the parties' respective allocation amounts on an objective basis. All of the wastes identified by the State as deriving from American Cyanamid were found exclusively during Phase II of the cleanup; thus, the percentage of the Phase II wastes those drums represented would be an objective, reasonable measurement of liability for American Cyanamid.

Similarly, all of Rohm & Haas' wastes were uncovered during Phase III, and the combined volume of those

wastes as a proportion of the total Phase III wastes would be a fair and rational measurement for Rohm & Haas' liability. This amount in turn should then be reduced by the $32,000 that Rohm & Haas spent to mitigate any alleged damages by removing its wastes —as well as materials deposited by others—from the site. *See generally United States* v. *Ottati & Goss, Inc.*, 694 F. Supp. 977, 999 (D.N.H. 1988) (authorizing application of an "indirect credit or off-set" in computing parties' liabilities). The Court of Appeals failed even to address this mitigation of damages by Rohm & Haas.[16]

These facts, along with the data in the record as to volumetric amounts at the site, provided ample opportunity to apportion the harm—particularly since, under applicable common law principles of apportionment, only a "rough justice," rather than statistical certitude, is required. *See generally United States* v. *Ottati & Goss, Inc.*, 24 E.R.C. 1152, 1152 (D.N.H. 1986) (apportioning liability on the basis of waste volumes sent to the site). *See also* Restatement (Second) of Torts §§ 433A, 881; W. Keeton, D. Dobbs, R. Keeton & D. Owen, *Prosser and Keeton on Torts* § 52 (5th ed. 1984) (the burden of showing a basis for apportionment is a relaxed one); Restatement (Second) of Torts § 433A, comments b, d (1965) ("rough estimate" or a "reasonable and rational basis" will suffice to show divisibility). The decision below against apportionment thus was plainly unjustified, and set the stage for the inequitable outcome that followed.

A linchpin of the Court of Appeals' decision rejecting apportionment was its determination that petitioners had,

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[16] The Court of Appeals also was in error when it asserted that, even if overall waste volumes could be calculated, the record did not permit apportionment of *costs* because the per-drum cost of removal was unknown. App. 13a n.11. As noted earlier, Rohm & Haas removed the equivalent of 76 drums for $32,000. This data plainly provides a foundation for calculating removal costs on a per-drum basis.

and failed to carry, the burden of showing that joint and several liability was inappropriate because the harm could be apportioned among the parties. App. 12a-13a. In doing so, the court shifted the burden of proof away from where it would normally be—on the State, as the moving party—and placed it on petitioners.

Yet *nothing* in the statute evidences any intent by Congress to authorize such burden-shifting. To the contrary, Congress elsewhere in CERCLA expressly listed the affirmative defenses on which defendants have the burden, such as acts of God or acts of third parties, and imposed a "preponderance of the evidence" standard for determining whether that burden is met. *See* Section 107(b) of CERCLA, 42 U.S.C. § 9607(b) (App. 73a-75a). Congress, then, obviously knew how to assign the burden to defendants in Superfund cases—and chose not to do so in connection with liability apportionment issues.[17] This Court should not permit the lower court's unauthorized shifting of the burden to stand.

The decision to place the burden on petitioners also violates the well-settled evidentiary principle that if one party has relevant knowledge peculiarly within its control, then that party carries the burden of proof on issues related to that knowledge. This rule squarely applies in environmental cases. Thus, in an action involving the handling of hazardous wastes under the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §§ 6901 *et seq.*, an EPA administrative law judge acknowledged that

> [i]n the absence of a statutory allocation of the burden of proof, the general rule is that the burden of proving a fact should be on the party whose means

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[17] *Cf. Russello* v. *United States*, 464 U.S. 16, 23 (1983) (when Congress includes language in one section of a statute but not in another, it is presumed that Congress intended different meanings for the two sections.)

> of knowledge about that fact are peculiarly within its control. J. Wigmore, 9 *Evidence* § 2486 (3d ed. 1940).[18]

This holding corresponds to this Court's own determination that

> the ordinary rule, based on considerations of fairness, does not place the burden upon a litigant of establishing facts peculiarly within the knowledge of his adversary.[19]

As noted, CERCLA is silent as to the allocation of the burden of proof concerning apportionment of liability among defendants. However, when, as here, the State has conducted a cleanup of a site and was the last party able to determine the composition and sources of the waste there, then the facts necessary to apportion liability for the harm are peculiarly within the State's control. This is particularly true in this case, in which the site cleanup was already well underway by the time petitioners were first notified of their potential connection with the site, and that cleanup was marred by shoddy recordkeeping by the government. In these circumstances, the burden of demonstrating that the harm is *not* divisible therefore properly falls on the State.

Not only did the court below improperly reject apportionment for past costs as a result of its misapplication of the burden of proof; as to future groundwater costs, the court went on to *preclude* petitioners from even attempting to show divisibility. This result stems from the

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[18] *In the Matter of: Central Print and Body Shop, Inc.*, USEPA Dkt. No. VIII-85-02; RCRA Appeal No. 86-3; 1987 RCRA LEXIS 23 (Jan. 12, 1987).

[19] *Campbell* v. *United States*, 365 U.S. 85, 96 (1961). *See also Old Ben Coal Corp.* v. *Interior Bd. of Mine Operations Appeals*, 523 F.2d 25, 36 (7th Cir. 1975) ("the burden of proving a fact is on the party who presumably has peculiar means of knowledge enabling him to prove its falsity, if it is false") (citing Wigmore, 9 *Evidence* § 2486 (3d ed.)).

First Circuit's decision to impose what amounts to a broad *per se* rule that not only holds petitioners in this case jointly and severally liable for these future costs—whatever they may be—but also serves as potential precedent at all other Superfund sites in support of automatically imposing joint and several liability for groundwater remedial costs. *See* App. 8a, 13a-14a.

The court's determination on groundwater was improper on two principal scores. First, the court in effect found petitioners liable for a blank check on the basis of no evidence, since the nature and extent of groundwater contamination at the site have yet to be determined. Not willing to wait for those with expertise in the field to study the issue, however, the court below summarily advanced its conclusion that any groundwater contamination that is found will be indivisible, so that petitioners must pay all cleanup costs associated with it.

The court's pronouncement on this point is cast in such generic terms that it will no doubt be applied at all Superfund sites with groundwater contamination. Since there is nothing in the statute or its legislative history indicating that Congress intended to carve out a groundwater exception to the general rule against automatic imposition of joint and several liability,[20] this Court

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[20] As a general matter, several methods of apportionment potentially could be applicable to groundwater at Superfund sites. For example, if groundwater tests reveal that only certain contaminants are in the water, then liability could be limited only to those companies whose wastes contained those contaminants. Alternatively, if a broad range of contaminants paralleling those found in the soil characterize the groundwater as well, then apportionment based on overall drum totals for the site may be appropriate. Finally, if groundwater contamination is particularly severe near, or attributable to, certain disposal trenches or areas at the site, then apportioning most of the liability for groundwater to companies whose wastes went to those trenches or areas may be in order. The opinion below brushes aside these (and other) poten-

should reverse the unwarranted *per se* application of such liability by the Court of Appeals.

IV. The Decision Below Impermissibly Applied CERCLA Retroactively in Violation of the *Ex Post Facto* and Due Process Clauses, and Impermissibly Allowed the Recovery of Pre-Enactment Costs by the State

Holding petitioners liable under CERCLA for the pre-Act disposal of their wastes at the Picillo site violates the *Ex Post Facto* and Due Process Clauses of the United States Constitution.[21] *See* U.S. Const., art. I, § 9, cl. (3) (*Ex Post Facto* Clause); *id.*, amend. V (due process clause); *see also id.*, amend. XIV. Under the *Ex Post Facto* clause, Congress may not enact a statute which "imposes a punishment for an act not punishable at the time it was committed, or imposes additional punishment to that then prescribed." *Cummings* v. *Missouri*, 71 U.S. (4 Wall.) 277, 325-326 (1867). As applied in this case, CERCLA is both punitive and retroactive, and therefore unconstitutional.

Under Justice Story's classic formulation, a statute applies retroactively when it "creates a new obligation, imposes a new duty, or attaches a new disability in respect to transactions or considerations already past * * *." *Society for the Propagation of the Gospel* v. *Wheeler*, 22 F. Cas. 756, 767 (C.C.D.N.H. 1814). The facts of this case squarely meet this test, since the disposal of petitioners' wastes at the Picillo site in 1977 occurred before the enactment of CERCLA in 1980.[22]

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tial methods of apportionment, however, in favor of a declaration of indivisibility.

[21] These arguments were raised and argued before the First Circuit. *See* Brief of Appellants, *O'Neil* v. *Picillo*, No. 88-1551 (1st Cir., filed Aug. 25, 1988) at 39-43.

[22] Although the First Circuit did not address the retroactivity question in detail—instead relegating its discussion of it to a

Moreover, since *Cummings* v. *Missouri*, *supra*, and *Ex Parte Garland*, 71 U.S. (4 Wall.) 333 (1867), purportedly nonpenal or "regulatory" retroactive legislation may be held unconstitutional when it is essentially punitive in character. Only last term, this Court confirmed in *United States* v. *Halper*, 109 S. Ct. 1892, 1902 (1989), that a nominally "civil" penalty must be considered punitive (for purposes of the Double Jeopardy Clause) when the government's proposed penalty subjects a "small gauge offender * * * to a sanction overwhelmingly disproportionate to the damages he has caused." [23] In this case, the lower court's imposition of joint and several liability on petitioners is so grossly out of proportion to their *de minimis* connection with the site as to be clearly punitive.

In addition to the *ex post facto* issues, retroactive application of the statute to the facts of this case raises important due process concerns. Under this Court's rulings in *Usery* v. *Turner Elkhorn Mining Co.*, 428 U.S. 1 (1976), and *Pension Benefit Guaranty Corp.* v. *Gray & Co.*, 467 U.S. 717 (1984), retroactive civil legislation offends due process if it is "harsh and oppressive" or "arbitrary and irrational." In *Turner Elkhorn*, the Court made clear that "[t]he retrospective aspects of legislation, as well as the prospective aspects, must meet the test of due process, and the justifications for the latter may not suffice for the former." 428 U.S. at 17. Retrospective application of CERCLA to petitioners cannot withstand this test. The State's attempt to recover the bulk of its past costs and all future costs from two par-

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footnote (App. 14a n.12)—the court appears to have assumed that the State's interpretation of CERCLA required retroactive application.

[23] *See also Hicks* v. *Feiock*, 108 S. Ct. 1423, 1429 (1988) ("the labels affixed either to the proceeding or to the relief imposed * * * are not controlling and will not be allowed to defeat the applicable protections of federal constitutional law").

ties who collectively contributed less than one-half of one percent of the waste found at the site is both arbitrary and irrational.

But even if CERCLA properly applied to pre-enactment *acts*—a proposition petitioners dispute—the statute plainly does not apply to recovery of pre-enactment *costs*.[24] In light of the serious constitutional difficulties raised by retroactive legislation, this Court has adopted a strong presumption against applying statutes retroactively. The Court has repeatedly stated that

> the first rule of construction is that legislation must be considered as addressed to the future, not to the past * * * [and] a retrospective operation will not be given to a statute which interferes with antecedent rights * * * unless such be "the unequivocal and inflexible import of its terms, and the manifest intention of the legislature." [*Greene* v. *United States*, 376 U.S. 149, 160 (1964) (quoting *Union Pacific R.R. Co.* v. *Laramie Stock Yards Co.*, 231 U.S. 190, 199 (1913)).]

Under this presumption, "laws by which human action is regulated * * * are never to be construed retrospectively unless the language of the act shall render such construction indispensable." *Reynolds* v. *McArthur*, 27 U.S. (2 Pet.) 417, 434 (1829). Neither the language nor the legislative history of CERCLA, however, provides that the Act is to be applied to pre-enactment response costs. The liability provisions in Section 107(a) contain no such authorization, while Section 302(a), quite to the contrary, provides that "unless otherwise provided, all provisions of this chapter shall be effective on December 11, 1980." 42 U.S.C. § 9652(a) (1980).

The courts have split on the question of whether the general presumption against retroactivity bars the gov-

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[24] In this case, $556,303 of the past response costs that the State seeks to recover were incurred during Phrases 0 and I of the site remediation, both of which preceded the enactment of CERCLA on December 11, 1980.

ernment from recovering response costs incurred prior to CERCLA's effective date. *Compare United States* v. *Northeastern Pharmaceutical & Chemical Co., Inc. (NEPACCO)*, 810 F.2d 726 (8th Cir. 1986), *cert. denied*, 484 U.S. 1008 (1988) (citing cases), *with United States* v. *Wade*, 20 E.R.C. 1849 (E.D. Pa. 1984). In the decision below, the First Circuit dismissed petitioners' past cost retroactivity claims with a footnote citing the *NEPACCO* decision, which in turn relied primarily upon the analysis in *United States* v. *Shell Oil Co.*, 605 F. Supp. 1064 (D. Colo. 1985).

The *Shell Oil* court found support for a retroactive application of the statute in the structure of the Act. In particular, the court held that Congress had "implicitly authorized" recovery of pre-enactment response costs in general by affirmatively *barring* the retroactive recovery of costs in the specific context of natural resource damages. *Id.* at 1076 (citing 42 U.S.C. § 9607(f)). But this analysis rests on the assumption that Congress was unaware of the presumption against retroactivity and believed that it needed to speak explicitly only to create an exception to retroactivity, when in reality the opposite is the case. It is implausible that Congress would be unfamiliar with such a fundamental principle, particularly since this Court has repeatedly held that Congress is presumed to know the rules of law announced by the courts.[25]

The court in *United States* v. *Wade*, by contrast, properly recognized the presumption against retroactivity and held that if Congress had intended to impose liability for pre-enactment costs under CERCLA, it would have made that intent clear in the language or legislative history of the statute. 20 E.R.C. at 1851. The *Wade* court found that, instead, there was no "clear indication that Congress ever focussed on the issue of liability for pre-enactment costs." *Id.* The court examined CERCLA's structure and

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[25] *E.g.*, *Cannon* v. *University of Chicago*, 441 U.S. 677, 696-697 (1979).

noted that when combined with the statute of limitations provision then in force, a retroactive application of the cost recovery provisions would allow a plaintiff to recover costs no matter how far back in the distant past they had been incurred. *Id.* Finally, the court rejected any inference from the limitations on recovery of natural resource damages contained in Section 107(f) (and a related provision in Section 111(d)(1)), on the ground that those provisions limited recovery based on the time at which the damage occurred, and not on the time at which funds are spent to remedy the damage. *Id.*

These conflicting decisions raise important issues regarding the type of evidence that is necessary in CERCLA cases to overcome the general presumption against retroactivity. The Court should grant the writ in order to reaffirm either that the statute cannot constitutionally be applied retroactively or that the rule requiring Congress to speak clearly if it intends for a statute to be applied retroactively extends to Superfund actions.

CONCLUSION

For the foregoing reasons, this Court should grant the writ and reverse the decision of the court below.

Respectfully submitted,

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November 20, 1989

APPENDICES

APPENDIX A

UNITED STATES COURT OF APPEALS
FIRST CIRCUIT

No. 88-1551

JAMES E. O'NEIL, In His Capacity As Attorney General
For The State Of Rhode Island,
Plaintiff, Appellee,

v.

WARREN V. PICILLO, SR., *et al.*,
Defendants, Appellees.

APPEAL OF AMERICAN CYANAMID COMPANY and
ROHM & HAAS COMPANY,
Defendants, Appellants.

Heard Feb. 27, 1989

Decided Aug. 21, 1989

Deming E. Sherman, with whom Mark A. Pogue, Edwards & Angell, Providence, R.I., Ellen Friedell, and Margaret R. Tribble, Wayne, N.J., were on briefs for appellants.

Gary Powers, Sp. Asst. Atty. Gen., Environmental Advocate, with whom James E. O'Neil, Atty. Gen., Providence, R.I., was on briefs for appellee James E. O'Neil, in his capacity as Atty. Gen. for the State of Rhode Island.

William G. Ballaine, with whom Maria J. Litman and Siff, Rosen & Parker, P.C., New York City, were on the brief for appellees Daniel Capuano, Jack Capuano, Estate of Anthony Capuano, United Sanitation, Inc., Sanitary Landfill, Inc. and A. Capuano Brothers.

Roger J. Marzulla, Asst. Atty. Gen., Carrick Brooke-Davidson, Jacques B. Gelin and Anne S. Almy, Dept. of Justice, Washington, D.C., on brief for the U.S., amicus curiae.

Before CAMPBELL, Chief Judge, COFFIN, Senior Circuit Judge, and FUSTE,* District Judge.

COFFIN, Senior Circuit Judge.

In July of 1977, the Picillos agreed to allow part of their pig farm in Coventry, Rhode Island to be used as a disposal site for drummed and bulk waste. That decision proved to be disastrous. Thousands of barrels of hazardous waste were dumped on the farm, culminating later that year in a monstrous fire ripping through the site. In 1979, the state and the Environmental Protection Agency (EPA) jointly undertook to clean up the area. What they found, in the words of the district court, were massive trenches and pits "filled with free-flowing, multi-colored, pungent liquid wastes" and thousands of "dented and corroded drums containing a veritable potpourri of toxic fluids." *O'Neil v. Picillo*, 682 F.Supp. 706, 709, 725 (D.R.I.1988).

This case involves the State of Rhode Island's attempt to recover the clean-up costs it incurred between 1979 and 1982 and to hold responsible parties liable for all future costs associated with the site.[1] The state's com-

* Of the District of Puerto Rico, sitting by designation.

[1] The EPA is not a party to this action, but has filed an amicus brief. For the sake of simplicity, we will refer collectively to the State and the EPA as the "government." Where it is necessary to distinguish between the two, we will do so.

plaint originally named thirty-five defendants, all but five of whom eventually entered into settlements totalling $5.8 million, the money to be shared by the state and EPA. After a month-long bench trial, the district court, in a thorough and well reasoned opinion, found three of the remaining five companies jointly and severally liable under section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601 *et seq.* ("CERCLA") for all of the State's past clean-up costs not covered by settlement agreements, as well as for all costs that may become necessary in the future. The other two defendants obtained judgments in their favor, the court concluding that the state had failed to prove that the waste attributed to those companies was "hazardous," as that term is defined under the Act.

Two of the three companies held liable at trial, American Cyanamid and Rohm and Haas, have taken this appeal. Both are so-called "generators" of waste, as opposed to transporters or site owners. *See* § 107(a)(3), 42 U.S.C. § 9607. Neither takes issue with the district court's finding that some of their waste made its way to the Picillo site. Rather, they contend that their contribution to the disaster was insubstantial and that it was, therefore, unfair to hold them jointly and severally liable for all of the state's past expenses not covered by settlements. They further contend that it was error to hold them liable for all future remedial work because the state has not demonstrated that such work ever will be necessary. With far less vigor, they also raise a series of equitable defenses, claiming that their liability should be reduced, either in whole or part, because (1) much of the damage to the site resulted from the government's sloppy handling of barrels; (2) the government's clean-up procedures were not cost-efficient as required by the Act, *see* § 107(a); and (3) their waste ended up at the site through the acts of wholly unrelated third parties, *see*

§ 107(b)(3). Finally, they argue that the Act should not be applied retroactively and that it was inappropriate for the district court to award the government prejudgment interest in this case. After a careful review of the record, we conclude that none of these arguments suffices to warrant reversal of the judgment below.

We need not spend time outlining the general factual and statutory background of this case. As we noted above, the district court's opinion is thorough and we see no reason to repeat what was said there. *See* 682 F.Supp. 706. Nor do we think it necessary to respond in detail to all of appellants' claims, as we could add little to the district court's reasoning or existing case law. We therefore confine our discussion to appellants' arguments concerning the unfairness of holding them jointly and severally liable for the government's past and future clean-up costs.[2]

Joint and Several Liability

Statutory Background

It is by now well settled that Congress intended that the federal courts develop a uniform approach governing the use of joint and several liability in CERCLA actions. The rule adopted by the majority of courts, and the one we adopt, is based on the Restatement (Second) of Torts: damages should be apportioned only if the *defendant* can demonstrate that the harm is divisible. *See, e.g., United States v. Chem-Dyne Corp.*, 572 F.Supp. 802, 809-11 (S.D.Ohio 1983); *United States v. Monsanto Co.*, 858 F.2d 160, 171-73 (4th Cir.1988); *United States v. Bliss*, 667 F.Supp. 1298, 1312-13 (E.D.Mo.1987).

The practical effect of placing the burden on defendants has been that responsible parties rarely escape joint and

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[2] During the course of the trial, the district court resolved numerous statutory questions concerning CERCLA's scope. We, of course, take no position on any ruling not contested on appeal.

several liability, courts regularly finding that where wastes of varying (and unknown) degrees of toxicity and migratory potential commingle, it simply is impossible to determine the amount of environmental harm caused by each party. *See, e.g., United States v. Chem-Dyne*, 572 F.Supp. at 811; *Monsanto*, 858 F.2d at 172-73. It has not gone unnoticed that holding defendants jointly and severally liable in such situations may often result in defendants paying for more than their share of the harm. *Cf. United States v. Monsanto*, 858 F.2d at 173. Nevertheless, courts have continued to impose joint and several liability on a regular basis, reasoning that where all of the contributing causes cannot fairly be traced, Congress intended for those proven at least partially culpable to bear the cost of the uncertainty. *See, e.g., United States v. Chem-Dyne*, 572 F.Supp. at 809-810.

In enacting the Superfund Amendments and Reauthorization Act of 1986 ("SARA"), Congress had occasion to examine this case law. Rather than add a provision dealing explicitly with joint and several liability, it chose to leave the issue with the courts, to be resolved as it had been—on a case by case basis according to the predominant "divisibility" rule first enunciated by the *Chem-Dyne* court. *See, e.g., United States v. Monsanto*, 858 F.2d at 171 n. 23 (*Chem-Dyne* decision endorsed by Congress); *Cf.* Garber, *Federal Common Law of Contribution Under the 1986 CERCLA Amendments*, 14 Eco.L.Q. 365, 374-75 (1987). Congress did, however, add two important provisions designed to mitigate the harshness of joint and several liability. First, the 1986 Amendments direct the EPA to offer early settlements to defendants who the Agency believes are responsible for only a small portion of the harm, so-called *de minimis* settlements. *See* § 122(g).[3] Second, the Amendments provide for a statutory cause of action in contribution, codifying what

[3] Appellants apparently were offered settlements, but chose instead to try this case.

most courts had concluded was implicit in the 1980 Act. *See* § 113(f)(1). Under this section, courts "may allocate response costs among liable parties using such equitable factors as the court determines are appropriate." We note that appellants already have initiated a contribution action against seven parties before the same district court judge who heard this case.

While a right of contribution undoubtedly softens the blow where parties cannot prove that the harm is divisible, it is not a complete panacea since it frequently will be difficult for defendants to locate a sufficient number of additional, solvent parties. Moreover, there are significant transaction costs involved in bringing other responsible parties to court. If it were possible to locate all responsible parties and to do so with little cost, the issue of joint and several liability obviously would be of only marginal significance. We, therefore, must examine carefully appellants' claim that they have met their burden of showing that the harm in this case is divisible.[4]

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[4] Before we can turn to the divisibility issue, however, we must first resolve a threshold question raised by appellants. Citing the Restatement (Second) of Torts § 433B, appellants contend that before joint and several liability may be imposed, the *government* has the initial burden of showing that the defendants were a "substantial" cause of the harm. If the government cannot prove that the defendants were substantial contributors, then joint and several liability may not be imposed and the defendant's burden of demonstrating the harm is divisible never arises. We reject this approach.

Even assuming that a strict application of the Restatement rule would allow appellants to escape joint and several liability in a situation such as this—something which is far from clear, appellants having provided us with no common law tort precedents to support their reading of the Restatement formulation—we would nonetheless decline to place this threshold burden on the government in CERCLA actions. As we noted earlier, Congress intended for the federal courts to develop a uniform approach to govern the use of joint and several liability. The Restatement is one source for us to consult. While courts generally have looked to the Restatement for guidance, they have declined to place the burden of showing that defendants are "substantial" contributors on the government,

Divisibility

The district court issued two rulings on joint and several liability. First, the court held appellants jointly and severally liable for all of the state's past costs not covered by settlements, roughly $1.4 million including prejudgment interest. According to appellants, this money was spent exclusively on "removal" costs or "surface cleanup" (e.g., sampling the waste, contacting responsible parties, and ultimately, *removing* the barrels and contaminated soil), and not on remedying the alleged damage to groundwater and other natural resources ("remedial" costs).[5] Second, the district court held appellants jointly and severally liable for all future removal costs to be incurred by the state, as well as for all cost-efficient remedial action the state (and EPA) may deem necessary after conducting further tests. The parties discuss the two holdings separately and we shall do likewise.

I. *Past Costs*

Appellants begin by stressing that the state's past costs involved only surface cleanup. They then argue that because it was possible to determine how many barrels of waste they contributed to the site, it is also possible to determine what proportion of the state's removal ex-

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recognizing Congress' concern that cleanup efforts not be held hostage to the time-consuming and almost impossible task of tracing all of the waste found at a dump site. *See, e.g., United States v. Chem-Dyne*, 572 F.Supp. at 809-11; *United States v. Monsanto*, 858 F.2d at 171-73. As we also noted earlier, in passing the 1986 Amendments Congress chose not to dismantle the existing approach, but instead, to add provisions dealing with *de minimis* settlements and contribution actions. It is at these stages, then, that the question of "substantiality" should be considered, and not at the point of determining liability to the government.

[5] Appellant's entire argument rests on this point. We assume, therefore, that if the $1.4 million in past expenses did cover more than "removal" costs, the government would have alerted us to this fact.

penses are attributable to each of them simply by estimating the cost of excavating a single barrel. The EPA advances two reasons why this approach is incorrect. First, it claims that it was not possible to determine how many barrels were traceable to appellants, nor was it possible to determine how much of the contaminated soil removed by the state was attributable to each appellant, and therefore, that it is impossible to apportion the state's removal costs. Second, it argues that even if it were possible to determine what proportion of the state's removal costs are attributable to appellants, joint and several liability still would have been proper because the "harm to be apportioned is not the cost but the environmental contamination that prompts the response action." We shall discuss the EPA's two arguments in reverse order.[6]

We state at the outset that we have some trouble with the EPA's second argument. Assuming the government ultimately undertakes remedial action to clean the groundwater in the area and then seeks to recover the costs of doing so, it will have in effect submitted two separate bills, one for the cost of removing the barrels and soil; and one for cleaning the water. We think it likely that the harm to the water will be indivisible, and therefore, that appellants could properly be held jointly and severally liable for the cost of this remedial action. But simply because the costs associated with cleaning the groundwater cannot be apportioned does not mean that we should decline to apportion the costs of removing the barrels and soil if those costs are in fact divisible. This would seem to follow from the basic common law principle that defendants not be held responsible for those costs traceable to others. We think that the EPA would have to accept as much. Nonetheless, the Agency adheres to the position that it is irrelevant whether or not the costs of *removal* can be apportioned.

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[6] The state essentially advances the same two arguments.

The reason the Agency takes this position is not, then, because the environmental harm that *actually occurred* was indivisible, but because the additional environmental harm that the government *averted* would have been indivisible had it occurred. This argument gives us pause because it appears to contravene the basic tort law principle that one pays only for the harm that was, and not for the harm that might have been.

Assume that it costs the government $1 million to remove all of the barrels from a site, but of this million, only $300,000 were spent removing the defendant's barrels. Also assume that had the barrels not been removed, the additional damage to the environment would have been $5 million and that this five million would not have been divisible. The government certainly would not take the position that it could recover $5 million in such a situation. Instead, it would ask only for the $1 million that it actually spent. Yet when it comes to apportioning that million, the Agency argues that we should look to whether the *$5* million of averted harm would be divisible.

If we were to accept the EPA's "averted harm" argument, it appears that apportionment would be appropriate only in the highly unlikely event that (1) all of the barrels were empty and no further environmental harm was possible; (2) the individual barrels were sufficiently far apart that even if further spillage occurred, there would be no commingling of wastes and thus no difficulty determining whose waste caused what damage; or (3) every barrel contained precisely the same type of waste so that even if there was further spillage and commingling, the environmental harm could be apportioned according to the volumetric contribution of each defendant. As the EPA undoubtedly recognizes, it rarely, if ever, will be the case that one of these three conditions is present. As a practical matter, then, joint and several liability will be imposed in *every* case.

Because we believe Congress did not intend for joint and several liability to be imposed without exception, we are troubled by the practical implications of the Agency's argument, the more so because it seems to find no support in common law tort principles, which were to be one of our benchmarks in developing a uniform approach to govern the imposition of joint and several liability. At oral argument, the Agency did not claim, however, that its theory fit within the common law framework of joint and several liability, but instead, took the position that these CERCLA cases are not standard tort suits. Although we recognize that Congress deviated from certain tort principles, *see New York v. Shore Realty Corp.*, 759 F.2d 1032, 1044 (2d Cir.1985), we had thought that on the issue of joint and several liability we were to take our lead from evolving principles of common law. It would seem incumbent upon the Agency, then, to demonstrate that on this *particular* question of joint and several liability, Congress intended for us to abandon the common law.

Having said all that, we choose not to resolve the issue in this case. Had appellants met their burden of showing that the costs *actually incurred* by the state were capable of apportionment, we would have had no choice but to address the EPA's theory. But because we do not believe appellants have done so, we can, and do, choose to leave the question for another day. We turn now to the EPA's first contention that the state's removal costs are not capable of apportionment.

Removal Costs

The state's removal efforts proceeded in four phases (0-3), each phase corresponding roughly to the cleanup of a different trench. The trenches were located in different areas of the site, but neither party has told us the distance between trenches. Appellants contend that it is possible to apportion the state's removal costs because there was evidence detailing (1) the total number of bar-

rels excavated in each phase, (2) the number of barrels in each phase attributable to them, and (3) the total cost associated with each phase. In support of their argument, they point us to a few portions of the record, but for the most part are content to rest on statements in the district court's opinion. Specifically, appellants point to the following two sentences in the opinion: (1) "I find that [American Cyanamid] is responsible for ten drums of toxic hazardous material found at the site;" and (2) as to Rohm and Haas, "I accept the state's estimate [of 49 drums and 303 five-gallon pails]." Appellants then add, without opposition from the government, that the ten barrels of American Cyanamid waste discussed by the district court were found exclusively in Phase II, and that the 303 pails and 49 drums of Rohm and Haas waste mentioned by the court were found exclusively in Phase III. They conclude, therefore, that American Cyanamid should bear only a minute percentage of the $995,697.30 expended by the state during Phase II in excavating approximately 4,500 barrels and no share of the other phases, and that Rohm and Haas should be accountable for only a small portion of the $58,237 spent during Phase III in removing roughly 3,300 barrels and no share of the other phases. We disagree.

The district court's statements concerning the waste attributable to each appellant were based on the testimony of John Leo, an engineer hired by the state to oversee the cleanup. We have reviewed Mr. Leo's testimony carefully. Having done so, we think it inescapably clear that the district court did not mean to suggest that appellants had contributed only 49 and 10 barrels respectively, but rather, that those amounts were all that could be *positively attributed* to appellants.

Mr. Leo testified that out of the approximately 10,000 barrels that were excavated during the four phases, only "three to four hundred of the drums contained markings which could potentially be traced." This is not surprising

considering that there had been an enormous fire at the site, that the barrels had been exposed to the elements for a number of years, and that a substantial amount of liquid waste had leaked and eaten away at the outsides of the barrels. Mr. Leo also testified that it was not simply the absence of legible markings that prevented the state from identifying the overwhelming majority of barrels, but also the danger involved in handling the barrels. Ironically, it was appellants themselves who, in an effort to induce Mr. Leo to lower his estimate of the number of barrels attributable to each defendant, elicited much of the testimony concerning the impossibility of accurately identifying all of the waste.[7]

In light of the fact that most of the waste could not be identified, and that the appellants, and not the government, had the burden to account for all of this uncertainty, we think it plain that the district court did not err in holding them jointly and severally liable for the state's past removal costs. Perhaps in this situation the only way appellants could have demonstrated that they were limited contributors would have been to present specific evidence documenting the whereabouts of their waste at all times after it left their facilities.[8] But far from

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[7] Appellants contend that the state's record keeping was subpar. Mr. Leo testified that because a cleanup effort of this magnitude had never before been undertaken in this country, it was natural that the state made mistakes. He also intimated, however, that there appeared to be little excuse for the state's complete failure to keep records during Phase I. We also are troubled by the state's poor effort during this stage of the cleanup. Absent a finding that the state acted in bad faith, however, we do not believe this is a sufficient reason to reverse the district court. In the context of this case, the state's failure to document its work during Phase I was harmless error since Mr. Leo testified that even when the state made an effort to identify the barrels, it could rarely do so.

[8] Appellants also might have proven that they were limited contributors by documenting that they had generated only a small amount of waste and then had ceased operations.

doing so, appellants deny all knowledge of how their waste made its way to the site.[9] Moreover, the government presented evidence that much of Rohm and Haas' waste found at the site came from its laboratory in Spring House, Pennsylvania and that during the relevant years, this lab generated over two thousand drums of waste, all of which were consigned to a single transporter.[10] Under these circumstances, where Rohm and Haas was entrusting substantial amounts of waste to a single transporter who ultimately proved unreliable, we simply cannot conclude, absent evidence to the contrary, that only a handful of the 2,000 or more barrels reached the site.[11]

II. *Future Liability*

The district court held appellants jointly and severally liable for all further removal costs taken by the state, as well as for all necessary remedial actions. Appellants have two principal objections. First, they claim that it was error to hold them responsible for the removal of certain piles of soil because the settling parties had agreed to undertake this cost. The state represents to

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[9] CERCLA is a strict liability scheme and it was therefore possible to hold appellants liable without such knowledge.

[10] Similar evidence was presented about American Cyanamid.

[11] Even if it were possible to determine how many barrels each appellant contributed to the site, we still would have difficulty concluding that the state's removal costs were capable of apportionment. To apportion the cost of removing the over 10,000 barrels, we would have to know the cost of removing a single barrel. Appellants have proceeded on the assumption that the cost of removing barrels did not vary depending on their content. This assumption appears untenable given the fact that the state had to take added precautions in dealing with certain particularly dangerous substances, including those traceable to Rohm and Haas. Moreover, in addition to excavating barrels the state had to remove large amounts of soil. Because there was substantial commingling of wastes, we think that any attempt to apportion the costs incurred by the state in removing the contaminated soil would necessarily be arbitrary.

us that these parties have now taken care of the piles and we therefore find the issue moot.

Second, appellants contend that it was improper to hold them liable for future remedial action because the state has not shown that such work will ever be needed. They do not claim, however, that if remedial action is shown to be necessary, it would be a mistake to assume that their waste contributed to the damage. We see no problem with the court giving the state (and EPA) time to conduct further tests. If after conducting the necessary tests, the government concludes that there was in fact no harm to the area's groundwater, then appellants will have nothing to worry about. Moreover, the district court ruled that under section 107 of the Act, the state may take only such measures as are cost-efficient. Appellants, therefore, will have an opportunity to challenge the state's chosen remedial measures at the appropriate time.

Conclusion

Appellants have argued ably that they should not have been held jointly and severally liable. In the end, however, we think they have not satisfied the stringent burden placed on them by Congress. As to all other issues, we affirm substantially for the reasons set out by the district court.[12] Appellants should now move on to their contribution action where their burden will be reduced and the district court will be free to allocate responsibility according to any combination of equitable factors

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[12] One of these other issues concerns the constitutionality of applying CERCLA retroactively. The district court held that CERCLA may be applied to pre-enactment conduct. Appellants contend, however, that even if the statute may be applied to pre-enactment *conduct*, it may not be applied constitutionally to pre-enactment *costs* incurred by the government, in this case the costs associated with Phases 0 and 1. We disagree and find persuasive the Eighth Circuit's reasoning in *United States v. Northeastern Pharmaceutical & Chemical Co.*, 810 F.2d 726, 734-37 (8th Cir. 1986) (citing cases).

it deems appropriate. Indeed, there might be no reason for the district court to place any burden on appellants. If the defendants in that action also cannot demonstrate that they were limited contributors, it is not apparent why all of the parties could not be held jointly and severally liable. However, we leave this judgment to the district court. *See, e.g., Developments, Toxic Waste Litigation*, 99 Harv.L.Rev. 1458, 1535-43 (1986).

Affirmed.

Costs to appellees.

APPENDIX B

UNITED STATES DISTRICT COURT
D. RHODE ISLAND

Civ. A. No. 83-0787 P

JAMES E. O'NEIL, In his Capacity as Attorney General of the State of Rhode Island

v.

WARREN V. PICILLO, SR., *et al.*

March 8, 1988

Gary Powers, Asst. Atty. Gen., Providence, R.I., for plaintiff.

Warren Picillo, Jr., pro se.

James H. Russell, Baker & Hostetler, Orlando, Fla., John Cuzzone, Jr., Richard Boren, Howard Lipsey, Providence, R.I., for Morton-Thiokol Corp.

Christopher Little, Providence, R.I., for Nat'l Starch Corp.

Leif Sigmond, pro se.

S. Paul Ryan, Providence, R.I., William G. Ballaine, Siff & Newman, New York City, C. Russell Bengston, Richard T. Linn, Providence, R.I., for United Sanitation,

Inc., Daniel Capuano, A. Capuano Bros., Inc., Jack Capuano, Sanitary Landfill, Inc., and Anthony Capuano.

A. Lauriston Parks, James T. Murphy, Providence, R.I., for Advanced Environmental Technology Corp.

Barbara S. Cohen, Anthony Muri, Providence, R.I., for Monsanto Co.

Gregory L. Benik, Providence, R.I., for Olin Corp.

Dominick Presto, Presto & Barbire, Rutherford, N.J., for Scientific Control Processing & Scientific Environmental Control Systems.

John F. Bomster, David J. Oliveira, Providence, R.I., for Hydron Lab.

Deming S. Sherman, Providence, R.I., for Exxon Research & Engineering Co., Rohm & Haas Co., American Cyanamid Co.

Alden C. Harrington, Providence, R.I., for Warren Picillo, Jr.

Harold E. Krause, Providence, R.I., for Michael Musillo.

Harold Hestnes, Hale & Dorr, Boston, Mass., Benjamin B. White, III, Providence, R.I., for GAF.

John F. Dolan, Rice Dolan & Kershaw, Dean Temkin, Willey & Leroy, Providence, R.I., Richard Ricci, Roseland, N.J., for Rutgers University.

John Baglini, Providence, R.I., for M & T Chemicals.

Richard Galli, Providence, R.I., for Hydron Laboratories, Inc.

Robert Canty, Csaplar & Bok, Boston, Mass., for Hercules, Inc.

Charles D. Wick, Providence, R.I., for Mack Barnes.

OPINION

PETTINE, Senior District Judge.

The State of Rhode Island ("State") seeks to hold the defendants jointly and severally liable for one million six hundred and thirteen thousand four hundred and thirty-seven dollars and thirty cents ($1,613,437.30) it expended in cleaning up a hazardous waste site in Coventry, Rhode Island known as the Picillo Pig Farm; it also asks this Court to declare that the defendants must respond in damages for all remedial costs it may incur in the future in the investigation and remediaton of damages to the State's natural resources allegedly resulting from the waste disposal by these defendants at said site.

The action is brought pursuant to the Comprehensive Environmental Response Compensation and Liability Act of 1980 ("CERCLA") as amended by the Superfund Amendments and Reauthorization Act of 1986 ("SARA") 42 U.S.C. sections 9601-9675.

The complaint originally named thirty-five defendants who were either owner/operators of the site, parties who allegedly transported waste there, parties alleged to have arranged for their waste to be transported to the site, and parties alleged to have produced waste deposited at the site. However, on the day designated for trial, the State and the United States Environmental Protection Agency ("EPA"), a non-party, settled with all the defendants except Olin Corporation ("Olin"), Hydron Laboratories, Inc. ("Hydron"), American Cyanamid Company ("American Cyanamid"), Exxon Research and Engineering Company ("Exxon"), and Rohm & Haas Company ("Rohm & Haas"). The settlements totaled 5.8 million dollars and included various agreements to perform specific remedial action. The State has represented that it will receive 25 percent of the settlement with the remaining 75 percent going to the federal agency.

These remaining defendants claim that the State has failed to prove that the materials in question were hazardous; they also argue that joint and several liability which the State seeks to impose is not appropriate in this case, and that they have the right to interpose several defenses, equitable and legal, which preclude recovery against them.

For the reasons which follow, I find for the plaintiff.

Prolixity is not a commendable hallmark of a legal opinion; the extent of the footnotes here indicate this paper deserves just such an unenviable stamp. In the margin I have substantially quoted from prior opinions rendered in this case; I do so because they set forth the dispositive law of vital legal issues and so I incorporate the same as part of this ruling. Colloquy took place throughout the trial as though certain of these issues had not been rendered; none of it was meaningful enough to cause me to change my position.

I. FACTUAL BACKGROUND

As an overall, with greater specificity being recited at appropriate points in the discussion of the legal issues, I repeat what I stated in my Opinion and Order of November 20, 1986, *Violet v. Picillo*, 648 F.Supp. 1283 (D.R.I.1986) ruling on Olin's Motion for Summary Judgment:

> This case arises from the chemical catastrophe of the Picillo pig farm in Coventry, Rhode Island. State environmental authorities discovered this chemical wasteland in 1977 after combustible chemicals caused a dramatic explosion and towering flames to rip through the waste disposal site. After the fire, state investigators discovered large trenches and pits filled with free-flowing, multi-colored, pungent liquid wastes; they also excavated approximately 10,000

> barrels and containers in varying states of decay containing hazardous chemical wastes.

Id. at 1286.

In this case, the plaintiff claims the following materials found at the site were specifically traced to the defendants: 303 five-gallon cans and 49 fifty-five gallon drums to Rohm & Haas; 21 fifty-five gallon drums to Hydron; 15 fifty-five gallon drums to Exxon; 3 fifty-five gallon lab packs and 11 fifty-five gallon drums to Olin; and 10 fifty-five gallon drums to American Cyanamid.

II. JURISDICTION

In the pre-trial stages of this action, defendants Exxon and Hydron filed motions for dismissal pursuant to Fed. R.Civ.P. 12(b)(2) for lack of *in personam* jurisdiction. Each disavowed any knowledge of how waste allegedly generated by them came to rest at the Picillo site, and each claimed to lack any significant links to the state of Rhode Island independent of the present litigation. In *Violet v. Picillo*, 613 F.Supp. 1563 (1985), I set forth a lengthy and detailed discussion of the jurisdictional aspects of this case and I repeat the same here in the margin.[1] I concluded by saying:

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[1] Rule 4(f) of the Federal Rules of Civil Procedure provides in pertinent part that:

> All process other than a subpoena may be served anywhere within the territorial limits of the state in which the district court is held, and, when authorized by a statute of the United States or by these rules, beyond the territorial limits of that state.

Under the framework created by the Rules, the jurisdictional reach of a federal district court is coextensive with that of the courts of the state in which it sits, unless a specific federal statute, or separate rule, permits nationwide service of process. *See generally Johnson Creative Arts v. Wool Masters*, 743 F.2d 947, 950 (1st Cir. 1984); 4 Wright & Miller, *Federal Practice and Procedure* section 1125 (1969 & 1984 supp.).—No separate Rule applies here.

[Continued]

[1] [Continued]
The inquiry, thus, is whether CERCLA is such an authorizing statute.

The state offers two theories in support of its claim that CERCLA authorizes federal process to run throughout the nation. It argues first that CERCLA's express terms supply the required authority, and alternatively that implying such a provision is necessary to effectuate the statutory purposes.

Turning first to the state's textual argument, I find that CERCLA is altogether silent as to personal jurisdiction and service of process, and find that the language of the statute will not bear plaintiff's contrary interpretation. Section 9613(b), subtitled "Jurisdiction; venue," provides:

> Except as provided in subsection (a) of this section, the United States district courts shall have exclusive original jurisdiction over all controversies arising under this chapter, without regard to the citizenship of the parties or the amount in controversy. Venue shall lie in any district in which the release or damages occurred, or in which the defendant resides, may be found, or has his principal office. For the purposes of this section, the Fund shall reside in the District of Columbia.

42 U.S.C. section 9613(b). In urging that this section authorizes national service of process, the state appears to confuse subject matter jurisdiction with personal jurisdiction. The language conferring exclusive original jurisdiction in the federal district courts "without regard to the citizenship of the parties or the amount in controversy"—language seized upon by the state—is relevant to *subject matter jurisdiction* in actions brought under the statute. Consistent with the language of Article III of the Constitution, and established canons of federal jurisdiction, the effect of this sentence is simply to place actions brought under CERCLA within the federal courts' federal question, and not diversity, jurisdiction. It strikes the Court as too clear to require further articulation that this language does not purport to govern questions of personal jurisdiction.

And, while the presence of language in section 9613 regarding venue demonstrates that Congress saw fit to fashion special venue rules for CERCLA actions, the absence of any parallel language regarding nationwide service of process suggests to the Court that Congress provided no special rule for personal jurisdiction. This is especially apparent in the face of the fact that the numerous other federal statutes authorizing nationwide service of process typically contain clear and express language extending the jurisdictional reach of the federal courts. *See, e.g.*, 15 U.S.C. section 5 (actions

by United States under Sherman Antitrust Act); 15 U.S.C. section 25 (actions by United States under Clayton Act); 15 U.S.C. section 77v(a) (actions under Securities Act of 1933); 15 U.S.C. section 78a (actions under Securities Exchange Act of 1934); 28 U.S.C. sections 1335, 1397, 2361 (actions under federal interpleader act).

It is true that express statutory language is not an absolute *sine qua non* for finding nationwide service of process, for courts have occasionally implied such authority in the absence of clear lanugage. *See, e.g., United States v. Congress Construction Co.*, 222 U.S. 199, 32 S.Ct. 44, 56 L.Ed. 163 (1911); *F.T.C. v. Browning*, 435 F.2d 96 (D.C.Cir. 1970). In these cases, however, and others that followed their teachings, the federal statutes involved laid venue in only one district, such that a failure to imply authority for extra-territorial process would deprive *any* federal court of the power to adjudicate cases under the statute, absent the fortuitous circumstance that a defendant enjoyed the necessary minimum contacts with the sole district in which venue was proper. No similar problem is posed here, for CERCLA lays venue "in any district in which the release or damages occurred, or in which the defendant resides, may be found, or has his principal office," 42 U.S.C. section 9613(b). The state has not cited, and the Court has not discovered, any case in which nationwide service of process was implied where venue was not laid exclusively in one district. Nor has the state cited, or the Court discovered, any direct reference in the Act's legislative history to personal jurisdiction in CERCLA actions, or to congressional contemplation of a special rule of national jurisdiction.

Nonetheless, plaintiff's belief that a nationwide service of process provision must be implied in CERCLA to further the statute's aims is not without strong appeal. Without analyzing the statutory scheme with any precision, it is clear that CERCLA's principal purpose is "to initiate and establish a comprehensive response and financing mechanism to abate and control the vast problems associated with abandoned and inactive hazardous waste sites." H.R. Rep. No. 96-1016, Part I, 96th Cong., 2d Sess., at 22 (*reprinted in* 1980 U.S.Code Cong. & Ad. News 6119, 6125, (hereinafter "1980 U.S.C.C. & A.N."). In service of its goal, Congress created, by last minute compromise in the waning hours of the 96th Congress, a "Superfund," to be jointly financed by industry and the federal government, to provide a ready source of financing for prompt clean-up of waste sites, 42 U.S.C. sections 9631, 9632, 9641; *see* 1980 U.S.C.C. & A.N., *supra*, at 6134-6135. Congress also created, *inter alia*, a federal cause of action in strict liability, through which owner-operators of hazardous waste sites, as well as disposal and transport arrangers, and generators of waste, 42 U.S.C. section

9607(a)(1)-(4), are made liable, subject only to limited statutory defenses, *id.* at section 9607(b)(1)-(4), for removal, remedial and response costs, *id.* at section 9607(a)(4)(A)-(B), and for certain specified environmental damages, *id.* at section 9607(a)(4)(C), when "there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance," *id.* at section 9607(a)(4).

Placing CERCLA in the context of its purposes, it is anomalous, indeed, to conclude that Congress meant to allow CERCLA defendants to interpose personal jurisdiction defenses. This is so for at least three reasons.

First, allowing CERCLA defendants to invoke the traditional minimum contacts doctrine, which looks largely to the extent to which a nonresident has chosen to affiliate itself with a particular forum, *see, e.g., Worldwide Volkswagen Corp. v. Woodson*, 444 U.S. 286, 297, 100 S.Ct. 559, 567, 62 L.Ed.2d 490 (1980), or at least with the stream of interstate commerce, *id.* at 297-98, 100 S.Ct. at 567, is at odds with the substantive liability provisions of the Act. Under the latter provisions, liability may generally attach to a defendant who has itself taken no deliberate action with respect to a particular site, but whose activities contributed to the release of hazardous substances at that site. The purpose of this "very stringent standard of liability," *U.S. v. Price*, 577 F.Supp. 1103, 1114 (D.N.J. 1983), is to further Congress' stated goals of "cost-spreading and assurance that responsible parties bear the cost of their clean up," *id.* at 1114; *see* 1980 U.S.C.C. & A.N. at 6119-6120; 126 Cong.Rec. S15,003 (daily ed. Nov. 24, 1980) (remarks of Sen. Chafee).

Bringing waste generators within the ambit of the Act's liability provisions was, as a practical matter, an especially important part of CERCLA's objective of appropriate cost allocation. The legislative history of CERCLA indicates that the Environmental Protection Agency estimated in 1980 that perhaps only ten percent of the 77.1 billion pounds of waste annually generated are disposed of in an environmentally sound manner. 1980 U.S.C.C. & A.N. at 6124. Calling waste generators to account for the consequences flowing from the disposal of their toxic waste products, generally without regard to whether they were themselves directly at fault in disposing of their wastes, represents a congressional decision to look for compensation to those economic actors who have participated in, and benefited from, an industry historically pervaded by irresponsible practices at various levels in the chain of disposal. *See, e.g.*, 1980 U.S.C.C. & A.N. at 6120 (discussing "massive problem" of "tragic consequences of improperly, negligently, and reck-

lessly [sic] hazardous waste disposal practices"); *id.* at 6121 (Congressional finding that "[u]nsafe design and disposal methods are widespread"); *id.* at 6128 (Congressional finding that "improper hazardous waste disposal has occurred throughout the country [and] the locations of many hazardous waste sites are unknown"); 126 Cong.Rec. S14,963 (daily ed. of Nov. 24, 1980) (remarks of Sen. Randolph) (discussing history of disposal practices and fact that numerous generators used haulers "to take wastes to unknown locations").

Significant among the pervasive industrial practices recognized by Congress is the problem of dumping wastes at improper, illegal or inappropriate sites, and the associated problem of "midnight," or clandestine dumping of chemical wastes at abandoned, remote or hidden locations. *See, e.g.*, 1980 U.S.C.C. & A.N. at 6121-22 (describing various practices at selected sites); 126 Cong.Rec. S14,973 (daily ed. Nov. 24, 1980) (remarks of Sen. Tsongas) (describing practices of "'midnight dumpers' who dispose of toxic chemicals and hazardous materials in quarries, in streams, in forests, or spread them on open roads . . ."); *id.* at 14,973 (remarks of Sen. Ford). And, legislators recognized that the problem of "midnight dumping" frequently involves waste that is transported over state lines. *See, e.g.*, 126 Cong.Rec. H9,461 (daily ed. Sept. 23, 1980) (remarks of Rep. Martin) ("because of the nature of clandestine dumping operations [a] State . . . which does not generate a large volume of toxic waste, has been victimized as a dumping ground for waste from other States"); 126 Cong.Rec. H11,798 (remarks of Rep. Edgar) (daily ed. Dec. 3, 1980) ("'midnight dumpers' [have] trucked wastes from all over the Eastern Seaboard and dumped them illegally at various sites through [Pennsylvania]"); 126 Cong.Rec. H9,448 (remarks of Rep. LaFalce) (daily ed. Sept. 23, 1980) (noting interstate scope of problem). This unfortunate history attests to the existence of a vast, unmonitored secondary toxic disposal market—one which, according to CERCLA's legislative history, weaves across state lines and reaches to every corner of this nation.

In the face of such a history, it is surely reasonable to assume that CERCLA actions may often involve generator defendants who arrange with an intermediary for waste disposal, and who lack direct knowledge as to how their waste may have to come to arrive in a foreign state—and lack, as well, independent contacts with that state. It thus strikes the Court as incongruous to permit defendants to seek dismissal upon a showing that they did not *deliberately* affiliate themselves with a particular forum state. And while

defendants in this case rightly point out that amenability to suit in a particular forum should not be confused with liability under the Act, the factors I discuss below suggest that there is an especially peculiar inconsistency between jurisdictional and liability rules in the case at hand.

Second, if the party suing to recover response costs and damages for cleaning up a single site is forced to bring several actions, in several states, in order to reach all those whose products may have been dumped at that site (but who may have few or no other contacts with the state), the increased litigation costs will obviously diminish that party's ultimate recovery and undermine the compensatory purposes of the statute. This is especially so where, as here, a state government, and not the EPA, is the party plaintiff, for states obviously lack the national litigation capacity of the federal government. Indeed, state governments faced with the prospect of maintaining multiple actions in multiple states may well forego suit against foreign defendants who cannot be haled into the forum. Reducing or eliminating the recovery available to states under CERCLA would be especially unfortunate because, as Congress recognized, it is state and local governments who have been historically saddled with the costs of cleaning up abandoned sites where no solvent owner can be found. *See* 1980 U.S.C.C. & A.N., at 6123. And, even where the federal government is suing, the increased costs of multiple lawsuits will necessarily diminish the amount of its recovery, and will consequently diminish the sum available to replenish the Superfund. *See* 1980 U.S.C.C. & A.N. at 6136 ("[t]he purpose of [the Act's liability provisions] is to provide a mechanism for prompt recovery of monies expended for the costs of such action from the [Superfund] from persons responsible therefor . . ."); Note, *Generator Liability Under Superfund for Clean-Up of Abandoned Hazarous Waste Dumpsites*, *supra*, at 1232 (discussing importance, in statutory scheme, of replenishing the Superfound).

Third, in CERCLA actions in which multiple defendants are involved, there will invariably be—as there are in this case—numerous cross-claims among the defendants, and litigation as to the proper scope of joint and several liability, *see State of New York v. Shore Realty*, 759 F.2d 1032, 1042 and n. 1 (2nd Cir. 1985) (discussing judicial role in formulating rules governing joint and several liability under the Act); contribution, indemnification, *see* 42 U.S.C. section 9607(e); and the like. If some defendants are not subject to the jurisdiction of the court in which the main action is brought, however, and fractionated proceedings in other

states ensue, the proper resolution of these issues will inevitably be complicated and impeded.

As these observations suggest, I am of the view that a rule of nationwide service of process under CERCLA has much to commend it, and would be the rule most consistent with Congress' objectives. I am also mindful, however, that the decision whether to allow extraterritorial process is for the Congress, and not the courts, to make. For this is not simply a case of statutory construction where it falls to a court to interpret statutory ambiguity, or silence, in the manner suggested by the statute's legislative history and its purpose. Rather, by virtue of the approach prescribed by the Federal Rules of Civil Procedure regarding personal jurisdiction in federal question cases, this is an instance where congressional silence is assigned a presumptive meaning—namely, that the federal district court will observe the territorial limits of the respective states in which they sit. Absent any compelling reason to inquire further, as was present in the cases involving statutes that laid venue in only one district, I am constrained to find that Congress has not authorized nationwide service of process in CERCLA actions. In reaching this result, I am in accord with the Magistrate's decision, and with the only other federal decision of which I am aware on this question. *See Wehner v. Syntex Agribusiness*, No. 83-642 (E.D.Mo. April 1, 1985), at 2 (concluding without discussion that CERCLA "does not authorize nationwide service of process").

B. Minimum Contacts

The absence of a rule authorizing national jurisdiction does not, of course, end the inquiry. I must next decide whether, under governing standards of personal jurisdiction, the four defendants before me are subject to the jurisdiction of a Rhode Island court.

. . . . . .

Whether this Court has jurisdiction over the . . . defendants depends upon whether it would comport with the "traditional notions of fair play and substantial justice," *International Shoe Co. v. Washington*, 326 U.S. 310, 316, 66 S.Ct. 154, 158, 90 L.Ed. 95 (1945) (citations omitted), rooted in the due process clause of the Fourteenth Amendment, to compel these parties to defend this litigation here. Because Rhode Island has extended its longarm statute to the extent permitted by the federal Constitution, R.I.G.L. section 9-5-33; *see Roger Williams General Hospital v. Fall River Trust Co.*, 423 A.2d 1384 (R.I. 1981), there are no separate state statutory requirements for the exercise of jurisdiction. The fundamental question here is, thus, whether "the defendant's con-

duct and connection with the forum State are such that he should reasonably anticipate being haled into court there." *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286, 297, 100 S.Ct. 559, 567, 62 L.Ed.2d 490 (1980). In judging whether sufficient minimum contacts exist to make an exercise of jurisdiction reasonable, "a court properly focuses on 'the relationship among the defendant, the forum and the litigation.'" *Calder v. Jones*, 465 U.S. 783, 104 S.Ct. 1482, 1486, 79 L.Ed.2d 804 (1985) (quoting *Shaffer v. Heitner*, 433 U.S. 186, 204, 97 S.Ct. 2569, 2579, 53 L.Ed.2d 683 (1977)). By way of guidance to courts charged with the task of evaluating this critical relationship, the Supreme Court has further explained that:

> Implicit in this emphasis on reasonableness is the understanding that the burden on the defendant, while always a primary concern, will in an appropriate case be considered in light of other relevant factors, including the forum State's interest in adjudicating the dispute, see *McGee v. International Life Ins. Co.*, 355 U.S. 220, 223, 78 S.Ct. 199, 201, 2 L.Ed.2d 223 (1957); the plaintiff's interest in obtaining convenient and effective relief, see *Kulko v. California Superior Court, supra*, 436 U.S. [84] at 92, 98 S.Ct. [1690] at 1697 [56 L.Ed.2d 132 (1978)] at least when that interest is not adequately protected by the plaintiff's power to choose the forum, cf. *Shaffer v. Heitner*, 433 U.S. 186, 211, n. 37, 97 S.Ct. 2569, 2583, n. 37, 53 L.Ed.2d 683 (1977); the interstate judicial system's interest in obtaining the most efficient resolution of controversies; and the shared interest of the several States in furthering fundamental substantive social policies, see *Kulko v. California Superior Court, supra*, 436 U.S., at 93, 98, 98 S.Ct., at 1697, 1700.

World-Wide Volkswagen v. Woodson, supra, 444 U.S. at 292, 100 S.Ct. at 564.

Determining whether, upon application of these general principles, it is "fair" and "reasonable" to subject defendants . . . to the jurisdiction of this Court, raises novel and difficult questions. Although a body of law has developed to guide courts in deciding jurisdictional questions where a nonresident manufacturer, distributor or merchant of a product is sued for injuries caused by the product in the forum state, *see generally World-Wide Volkswagen, supra*; 4 Wright & Miller, *Federal Practice and Procedure*, section 1067, at 38-44 (1984 Supp.), I have discovered few cases applying these principles to nonresident generators, transporters or handlers of hazardous waste products, who are called to answer

in the forum state for damage caused by the disposal of their wastes there. Believing that the precedents dealing with product manufacture and sales nonetheless offer the closest analogy, I look primarily to those cases for guidance.

In *World Volkswagen* the Court held that Oklahoma could not predicate jurisdiction over a New York automobile dealer and a New York automobile distributor (whose market was confined to New York, New Jersey and Connecticut), upon the fact that a car sold by these parties in New York was driven to Oklahoma and was involved in an accident there. Given the fact that these defendants had a "total absence of affiliating circumstances" with Oklahoma 444 U.S. at 294, 100 S.Ct. at 565, and had in no way sought, themselves or "indirectly, through others," *id.*, to serve the Oklahoma market, the Court held that it would violate due process to base jurisdiction on such a single fortuitous circumstance. If merchants serving only a limited market were subject to suit wherever a product sold by them happened to be taken and cause injury, "[e]very seller of chattels would in effect appoint the chattel his agent for service of process. His amenability to suit would travel with the chattel," *id.* at 296, 100 S.Ct. at 566.

The Court in the *World-Wide Volkswagen* case was not directly confronted with the question whether jurisdiction in the action was proper over the international and national distributors of the car involved in the accident, for those parties, while defendants in that case, did not contest their amenability to suit. In dictum, however, the Court contrasted the situation of such distributors with that of local seller, and made clear that jurisdiction could be asserted over these distributors, explaining:

> if the sale of a product of a manufacturer or distributor such as Audi or Volkswagen is not simply an isolated occurrence, but arises from the efforts of the manufacturer or distributor to serve directly or indirectly, the market for its product in other States, it is not unreasonable to subject it to suit in one of those States if its allegedly defective merchandise has there been the source of injury to its owner or to others. The forum State does not exceed its powers under the Due Process Clause if it asserts personal jurisdiction over a corporation that delivers its products into the stream of commerce with the expectation that they will be purchased by consumers in the forum State. *Cf. Gray v. American Radiator & Standard Sanitary Corp.*, 22 Ill.2d 432, 176 N.E.2d 761 (1961).

Id. at 297-298, 100 S.Ct. at 567. As subsequent courts developing this pivotal distinction have explained, the key factors justifying a different jurisdictional rule are twofold.

[Continued]

[1] [Continued]

First, unlike local merchants, such interstate distributors have an "interest in reaching as broad a market as" possible, *Bean Dredging Corp. v. Dredge Technology Corp.*, 744 F.2d 1081, 1085 (5th Cir. 1984) and place their products into the stream of commerce with either the subjective intention, *see, e.g., Stabilisierungsfonds Fur Wein v. Kaiser*, 647 F.2d 200, 203 (D.C.Cir. 1981), or objective reason to know, *see, e.g., Oswalt v. Scripto*, 616 F.2d 191, 200-201 (5th Cir. 1980) that their products will be sold "to a nationwide market, that is, in any or all states," *id.* at 200. Thus, even if their "products were sold indirectly through importers or distributors with independent sales and marketing schemes," *DeJames v. Magnificence Carriers, Inc.*, 654 F.2d 280, 285 (3d Cir.), *cert. den.*, 454 U.S. 1085, 102 S.Ct. 642, 70 L.Ed.2d 620 (1981), (citations omitted)—independent parties whom the defendant distributors do not directly control, *Nelson by Carson v. Park Industries*, 717 F.2d 1120, 1126 (7th Cir. 1983), *cert. den.* 465 U.S. 1024, 104 S.Ct. 1278, 79 L.Ed.2d 682 (1984)—and even if their products are sold to an intermediary with " 'no indication whatsoever as to their ultimate destination,' " *Bean Dredging Corp. v. Dredge Technology Corp., supra*, 744 F.2d at 1085 (quoting party's brief), the fact that these manufacturers or distributors place their products in a stream of commerce destined for sale through a broad interstate market, and reap the attendant benefits, renders them properly subject to suit in one of the states comprising that market.

The second important distinguishing factor is that, unlike local merchants serving a self-circumscribed market, who "ordinarily [have] no control over where the buyer takes the product after it is sold," *Comm. of Puerto Rico v. S.S. Zoe Colcotroni*, 628 F.2d 652, 669 (1st Cir. 1980), *cert. den.* 450 U.S. 912, 101 S.Ct. 1350, 67 L.Ed.2d 336 (1981), parties operating on a broad interstate scale can act "to limit the states in which [their products will] be sold," *Bean Dredging Corp., supra*, 744 F.2d at 1085, and can thereby protect themselves against suit in an undesired forum. *See World-Wide Volkswagen v. Woodson, supra*, 444 U.S. at 297, 100 S.Ct. at 567 (potential defendants can "structure their primary conduct with some minimum assurance as to where that conduct will and will not render them liable to suit"); *Oswalt v. Scripto, supra*, 616 F.2d at 200 (distributor could have limited the states in which its products would be sold); *Rockwell International Corp. v. Costruzioni Aeronautiche*, 553 F.Supp. 328, 333 (E.D.Pa. 1982) (manufacturer could have limited the states in which its products would be sold).

Applying these teachings to the case before me, I find that jurisdiction is proper over . . . Hydron. Although those defendants

attempt to liken themselves to the local sellers in these products liability cases, on the record before me, defendants are more properly analogized to the interstate distributors and manufacturers. I fully recognize that applying these principles to generators of hazardous wastes requires some extension of these principles beyond the context in which they were originally developed, but I believe that such an extension is warranted, indeed required, here.

The factual circumstances present here strongly indicate that . . . defendant should have known, if it did not, in fact know, that it was dispatching its hazardous chemical wastes into a stream of commerce broad enough to include "*any* or *all* states," *Rockwell Intern. Corp. v. Costruzioni Aeronautiche, supra,* 553 F.Supp. at 333 (emphasis in original). In substance, what . . . defendant did was to place its wastes in the hands of an intermediary—one who, according to the record, quite literally operated in more than one state—with no reasonable expectation as to where these materials were destined for disposal, and with no attempt to specify the location, or even the state, in which its wastes were to be disposed. This chosen course of conduct must be viewed in the context of a hazardous waste disposal industry recognized by Congress to be permeated, on a national scale, by problems of improper waste disposal, and in particular by problems of dumping wastes—frequently taken across state lines—at illegal, inappropriate or remote sites. When so viewed, each defendant's decision to send its toxic wastes on a virtual one-way journey to anywhere represents a decision to avail itself of the benefits of a potentially boundless national disposal market.

Certainly, benefits flowed to the defendant[] as a result of [its] chosen means of disposing of [its] wastes. [It] transferred from [itself] to a third party the burdens of properly transporting and locating hazardous waste for disposal, and of ensuring safe and environmentally sound disposal. Because disposal of wastes that are the by-products of defendants' commercial (or research) activities is a necessary predicate for continued activity, the benefits of these transferred burdens are significant. To be sure, the benefits inuring to these waste generators are not precisely like in kind to those enjoyed by the ordinary interstate distributor or manufacturer, whose profits grow as its market enlarges, and who seeks deliberately to reach as broad a market as possible. Yet, while these generator defendants may not have had a discrete commercial interest in spreading their toxic wastes through as broad a disposal network as possible, there can be no doubt, and Congress recognized as much, that the continued

availability, and expansion, of a secondary, substandard disposal market has carried economic benefit for the industry as a whole.

Moreover, this is not a situation in which the product placed in the stream of commerce is an ordinary one. Rather, these defendants dispatched into that stream volatile and dangerous toxic substances—and did so without determining where these substances would come to rest. As other courts have recognized, and as common sense suggests, where a defendant deals in such inherently dangerous products, a lesser showing than is ordinarily required will support jurisdiction. *See Poyner v. Erma Werke GMBH*, 618 F.2d 1186, 1192 (6th Cir. 1980); *Velandra v. Regie Nationale Des Usines Renault*, 336 F.2d 292, 298 (6th Cir. 1964); *cf. Valve Engineering Co. v. Gisell*, 140 Ga.App. 44, 230 S.E.2d 29 (1976). This is especially so where, as here, the defendant(s) engage[d] in heavily regulated activities, such that it is reasonable for [it] to foresee, given their chosen course of conduct, having to litigate in a distant forum. *See generally G.R.M. v. Equine Inv. and Man. Group*, 596 F.Supp. 307, 317 (S.D.Tex. 1984).

Nor [was] defendant(s) powerless to protect [itself] from having to litigate in Rhode Island. Rather than engaging an intermediary, and giving that intermediary what appears on this record to be complete discretion in locating its wastes for disposal, [the] defendant could have handled its own waste. Alternatively, [it] could have selected, or participated in selecting, a disposal site, could have contractually required that its wastes be disposed there, and could have acted to ascertain that its waste was, in fact, finally deposited at this predetermined site. By choosing, instead, an open-ended course, the defendant(s), like the interstate distributors and manufacturers in the previously discussed cases, did not take steps, as [it] could have, so as to "be reasonably certain that [it] would not be haled into court in an undesired forum." *Comm. of Puerto Rico v. S.S. Zoe Colcotroni, supra*, 628 F.2d at 670 (insurer with no direct business contacts in Puerto Rico is subject to jurisdiction there in suit for environmental damage caused by tanker oil spill, where it chooses to insure vessels that travel to Puerto Rico; "[b]y limiting its coverage to specified jurisdictions, [the insurer] could be reasonably certain it would not be haled into court in an undesired forum . . . an insurer is not at the mercy of the insured owner's unilateral choice of destinations in the same way a seller of chattels is at the mercy of the buyer"). Without regard to whether any state or federal law required [it] to undertake such steps—a question I need not and do not consider—I find that having failed to structure [its] primary conduct

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to provide [itself] with minimal assurance as to where [it] would be compelled to defend hazardous waste litigation, defendant(s) may not now reasonably claim unfair surprise or undue burden in being called to answer in a state where [its] hazardous substances are alleged to have caused harm.

This conclusion is buttressed by the fact that all of the other factors enumerated by the *World-Wide Volkswagen* court as bearing on the reasonableness of jurisdiction strongly favor a Rhode Island forum.

Certainly Rhode Island's interest in adjudicating this suit could hardly be more compelling. In addition to the state's recognized "significant interest in redressing inquiries that actually occur within the State," *Keeton v. Hustler Magazine*, 465 U.S. 770, 104 S.Ct. 1473, 1479, 79 L.Ed.2d 790 (1984), Rhode Island has an extraordinarily strong sovereign interest in providing a forum for actions concerning injury to land within its borders, and for actions which seek recovery of public monies expended to protect such land. Likewise the interest of the plaintiff state government "in obtaining convenient and effective relief," *World-Wide Volkswagen, supra*, 444 U.S. at 292, 100 S.Ct. at 564, fairly depends upon its being able to litigate this action in a single forum. In such multiparty, potentially labrynthine litigation, it will no doubt substantially burden the state to force it to proceed in parallel or piecemeal actions—and doubly so in light of the limited litigation resources available to a state government.

The interests of "the interstate judicial system . . . in obtaining the most efficient resolution of" this dispute, *id.*, would plainly be served by a single adjudication of the questions raised here—all of which pertain to the same series of events at the Picillo farm. Given the matrix of cross-claims and defenses raised, and likely to be raised here, *see Infra*, at 723-724, considerations of economy and justice alike weigh heavily in favor of a Rhode Island forum. . . .

Lastly, the several states of this nation surely share an important substantive interest in furthering policies designed to mitigate the wide-spread effects of improper management and disposal of hazardous chemical wastes. Each state's ability to utilize its own legal tools in this area, as well as those provided by the federal government, depends significantly on each state's ability to reach parties whose disposal activities have harmed its environment and its population. Because state (and local) treasuries have shouldered the greatest financial burden in cleaning up toxic waste sites where no solvent responsible party is locally

> I emphasize that only a *prima facie* showing of jurisdiction has been made here. . . .
>
> the final determination of the key fact issues bearing on jurisdiction over the person will be made at trial. If they are decided in a way that defeats jurisdiction as to [any] defendant, as to that defendant plaintiff's action will then be subject to dismissal for want of jurisdiction over the person.

Id. at 1579 n. 17 (citing *North American Video v. Leon*, 480 F.Supp. 213, 216 (D.Mass.1979)).

Hydron renews its motion post-trial nourished by the testimony of David Rappaport, a director and Vice President (legal); he testified that:

> Hydron was a Delaware corporation;
>
> Its principal place of business in 1977 was New Brunswick, New Jersey;
>
> It never had any other principal place of business, or any other place of business;
>
> It has never had an office in Rhode Island; To his knowledge, and based on a search of Hydron's records the only contact with the State of Rhode Island was the delivery in 1976, by mail, of a *free* sample of one ounce of a chemical to a Rhode Island firm which had requested that the sample be sent;
>
> Hydron did not sell or ship any other products into the State of Rhode Island;
>
> Hydron never qualified to do business in Rhode Island;
>
> It never nominated any agent for service of process in Rhode Island.
>
> It placed no ads in Rhode Island.

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available, there can be no doubt that this shared substantive interest is a powerful one.

Accordingly, for the foregoing reasons, I hold that a prima facie showing has been made that defendants . . . are properly subject to the jurisdiction of this court.

In *Violet*, ruled that non-resident generators of hazardous wastes were akin to national distributors who placed their products into the stream of commerce through intermediaries. 613 F.Supp. at 1576. I held that because these generators "should have known, if [they] did not, in fact know, that it was dispatching its hazardous wastes into a stream of commerce broad enough to include any and all states" it did not offend due process to subject them to suit in one of the states comprising its "market." *Id.* at 1576-77 (citations omitted).

I am not diverted from my original holding by Hydron's proffered evidence. The analysis of jurisdiction in *Violet* was premised upon a theory of *specific* judisdiction. *See id.* at 1575 n. 12. A court exercises specific jurisdiction when the plaintiff's claims "arise out of" or are "directly related" to defendant's contacts with the forum state. *DuPont Tire Serv. v. North Stonington Auto-Truck Pl., Inc.*, 659 F.Supp. 861, 863 (D.R.I.1987) (J. Lagueaux). General jurisdiction, however, arises where plaintiff's claims do not arise out of or are not directly related to defendant's claims. *Id.* Consequently, my only concern in *Violet* was whether the shipment of hazardous wastes into Rhode Island through intermediaries was a sufficient "contact" with the state for purposes of jurisdiction. Because Hydron's evidence relates to contacts unrelated to the cause of action, that is, contacts relevant to the concept of general jurisdiction, I see no reason to reconsider my earlier position.

I am moved, however, to reconsider my opinion in *Violet* for another reason. The holding in that case was predicated on the "stream of commerce" doctrine seemingly sanctioned in *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286, 100 S.Ct. 559, 62 L.Ed.2d 490 (1980). There, the Supreme Court observed that "[t]he forum state does not exceed its powers under the Due Process Clause if it asserts personal jurisdiction over a corporation that delivers its products into the stream of

commerce with the expectation that they will be purchased by consumers in the forum state." *Id.* at 297-98, 100 S.Ct. at 567.

While *Violet* was the first case to use this analysis in toxic waste cases, other courts confronted with the issue found it suitable as well. *See e.g., Allied Towing v. Great Eastern Petroleum Corp.*, 642 F.Supp. 1339, 1355-56 (E.D. Va. 1986); *U.S. v. Conservation Chemical Co.*, 619 F. Supp., 162, 247-50 (W.D.Mo.1985). Since *Violet* and these other cases were decided, the Supreme Court and the First Circuit Court of Appeals handed down significant opinions concerning the continued vitality of the "stream of Commerce" doctrine. While neither of these opinions were raised by the parties, they must be examined for their effect on the instant litigation.

In *Asahi Metal Ind. v. Super. Ct. of Cal., Solano Cty.*, —— U.S. ——, 107 S.Ct. 1026, 94 L.Ed.2d (1987), Asahi Metal, a Japanese manufacturer of tire valves, sold its products to a Taiwanese tire manufacturer, who distributed its tires to the United States. A product liability suit was brought in California state court against the Taiwanese tire producer arising from a motorcycle accident allegedly caused by a defect in a tire. The Taiwanese company thereupon filed a cross-complaint against Asahi Metal, seeking indemnification.

Asahi argued that it was not properly before the California courts. The California Supreme Court disagreed. It held that Asahi's intentional act of placing its valves into the stream of commerce by delivering them to the Taiwanese tire manufacturer, coupled with its awareness that some of them would end up in California, were sufficient contacts to support jurisdiction.

The United States Supreme Court reversed. In a divided opinion, the plurality of four justices held:

> The placement of a product into the stream of commerce, without more, is not an act of the defendant purposefully directed to the forum state. Additional conduct of the defendant may indicate an intent or purpose to serve the market in the forum state, for example, designing the product for the market in a forum state, establishing channels for providing regular advice to customers in the forum state, or marketing the product through a distributor who has agreed to serve as the sales agent in the forum state. But a defendant's awareness that the stream of commerce may or will sweep the product into the forum state does not convert the mere act of placing the product into the stream into an act purposefully directed toward the forum state.

Id. at 1033. Although the plurality's renunciation of a doctrine that had acquired a substantial pedigree among the lower federal courts was soundly criticized by five justices in two concurring opinions, it must be considered the last word on this aspect of minimum contacts doctrine. *See Dupont Tire Service Center, Inc., supra,* 659 F.Supp. at 863.

The First Circuit also had occasion to discuss the "stream of commerce" doctrine in *Dalmau Rodriguez v. Hughes Aircraft Co.*, 781 F.2d 9 (1st Cir.1986). In that case, Hughes Aircraft company, a Delaware corporation with offices in California, manufactured helicopters which it sold to an intermediary who had a contract to supply helicopters to the Puerto Rico police department. An alleged defect in the helicopters injured two police officers, who brought suit against Hughes. While Hughes argued lack of minimum contacts, plaintiffs argued that because Hughes knew that its helicopters were to be delivered to Puerto Rico, stream of commerce doctrine permitted jurisdiction. The first circuit, however, rejected this argument:

> Assuming that Hughes knew that the destination of the helicopters was Puerto Rico, we do not think that the sale of two helicopters to a police department can be the source of a stream of commerce. This is not like opening up a particular territory for sales to the general public. . . . There is nothing in the record showing that Hughes advertised regularly in magazines circulated in Puerto Rico or aimed its advertising at Puerto Rico.
>
> . . . .
>
> We do not think that whether Hughes knew that the helicopters were being sold to Puerto Rico police department has any jurisdictional significance. The test is not knowledge of the ultimate destination of the product, but whether the manufacturer has purposely engaged in forum activities so it can reasonably expect to be haled into court there. . . .

Id. at 15.

I believe that the extra conduct seemingly required by the *Asahi* and *Rodriguez* courts is not necessarily required in cases of the kind presented here. It has long been acknowledged, and it was unanimously reaffirmed by the Court in *Asahi*, that "the determination of the reasonableness of the exercise of jurisdiction in each case" will depend, not only on an evaluation of the defendant's connection with the forum state, but also on an evaluation of "the interests of the forum state, and the plaintiff's interest in obtaining relief." 107 S.Ct. at 1033-34 (section joined by unanimous Court). As the first circuit has stated, "[p]art of the due process equation involved in the minimum contacts standard is whether a defendant's activities relating to a particular state are such as to give that state a legitimate interest in holding a defendant answerable on a claim related to those activities." *Johnson Creative Arts, Inc. v. Wool Masters, Inc.*, 743 F.2d 947, 951 (1st Cir.1984). It is apparent from this, and it has generally been recognized, that the nature and sig-

nificance of the state's interest may have a bearing on the nature and extent of the necessary contacts. *See Hanson v. Denckla*, 857 U.S. 235, 252, 78 S.Ct. 1228, 1239, 2 L.Ed.2d 1283 (1958); *see also Chattanooga Corp. v. Klinger*, 528 F.Supp. 372, 378 (S.D.Tenn.1981) (in applying the minimum contacts test the requisite amount of contacts should vary according to the state's interest); Comment, *Federalism, Due Process, and Minimum Contacts: World-Wide Volkswagen Corp. v. Woodson*, 80 Colum.L.Rev. 1341, 1351-52 (1980).

As I stated in *Violet*:

> Certainly Rhode Island's interest in adjudicating this suit could hardly be more compelling. In addition to the state's recognized "significant interest in redressing injuries that actually occur within the State," Rhode Island has an extraordinarily strong sovereign interest in providing a forum for actions concerning injury to land within its borders, and for actions which seek recovery of public monies expended to protect such land.

613 F.Supp. at 1579 (citations omitted). Enhancing this interest is the fact that we are not here dealing with an ordinary product. The defendants dispatched volatile and inherently dangerous toxic substances. "Injuries caused by inherently dangerous articles imported through independent distributors certainly fall within that class of litigation with which the forum state has a deep interest in adjudicating." *Poyner v. Erma Werke GMBH*, 618 F.2d 1186, 1192 (6th Cir.), *cert. denied*, 449 U.S. 841, 101 S.Ct. 121, 66 L.Ed.2d 49 (1980); *See Klinger, supra*, 528 F.Supp. at 378 ("contacts may be minimized if the claim involves the placing of dangerous instrumentality in commerce"); *see also Asahi Metal Ind.*, 107 S.Ct. at 1038 (Stevens, J., White, J., and Blackmun, J., concurring) ("Whether or not . . . conduct rises to the level of purposeful availment requires a constitutional determination that is affected by the volume, the value, and the

hazardous character of the components.") (emphasis added).

Additionally, the fact that the non-resident generators operate in a nationally regulated industry increases the significance of the contact with the forum. As one court has put it, "under CERCLA, a generator-defendant can reasonably anticipate being haled into court in any state in which [its] hazardous substances . . . are found." *U.S. v. Conservation Chemical Co.*, 619 F.Supp. 162, 249 (D. Mo.1985); *see also Allied Towing Corp. v. Great Eastern Petroleum Corp.*, 642 F.Supp. 1339, 1356 (E.D.Va.1986) ("the scope of 'foreseeability' broadens when the enterprise giving rise to the action is subject to pervasive federal regulation"). Moreover, simply as a matter of elemental fairness, it is not unreasonable to expect a person engaged in a highly regulated activity "to suffer the consequences of being sued in a distant place." *Oxford First Corp. v. PNC Liquidating Corp.*, 372 F.Supp. 191, 202 (E.D.Pa.1974). As the Supreme Court has recognized:

> [W]hen an entrepreneur embarks upon [certain types of] business activities, he has voluntarily chosen to subject himself to a full arsenal of governmental regulation. . . .
>
> [B]usinessmen engaged in such federally licensed and regulated enterprises accept the burdens as well as the benefits of their trade. . . . The businessman in a regulated industry in effect consents to the restrictions placed upon him.

Marshall v. Barlow's Inc., 436 U.S. 307, 314, 98 S.Ct. 1816, 1821, 56 L.Ed.2d 305 (1978).

Finally, as I stated in *Violet*, the interests of the plaintiff state government "in obtaining convenient and effective relief," *World-Wide Volkswagen, supra*, 444 U.S. at 292, 100 S.Ct. at 564,

> fairly depends upon its ability to litigate this action in a single forum. In such multiparty, potentially labyrnthine litigation, it will no doubt substantially burden the state to force it to proceed in parallel or piecemeal actions—and doubly so in light of the limited litigation resources available to the state.

613 F.Supp. at 1579.

Accordingly, I find that this court has the requisite jurisdiction.

III. LIABILITY

I discussed generator liability at length in *Violet*, 648 F.Supp. at 1288-90; I now incorporate that discussion as part of this ruling.[2]

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[2] *Generator Liability Under CERCLA Section 107.* Section 107 of CERCLA defines liability for purposes of the CERCLA statute. Under section 107, four classes of individuals may be held liable for cleanup costs associated with hazardous waste control: 1) the owner and operator of a vessel or facility; 2) owners or operators of facilities at which hazardous wastes are disposed; 3) any person who by contract, agreement, or otherwise arranged for transport to or disposal or treatment of hazardous wastes at a facility owned by another; and 4) any person who accepts or accepted any hazardous substance for transport to disposal or treatment facilities. The liability of generator defendants is covered in the third category of liable parties. The precise language of section 107(a)(3) states:

> Notwithstanding any other provision or rule of law, and subject only to the defenses set forth in subsection (b) of this section—
>
> (3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treament, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility owned or operated by another party or entity and containing such hazardous substances . . .
>
> (4) . . . from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance, shall be liable for—

(A) all costs of removal or remedial action incurred by the United States Government or a State not inconsistent with the national contingency plan;

(B) any other necessary costs of response incurred by any other person consistent with the national contingency plan; and

(C) damages for injury to, destruction of, or loss resulting from such a release.

42 U.S.C. section 7607(a)(3) (1982).

The ambiguity of this provision is apparent upon close inspection. As one court has noted, the literal terms of the statute could be interpreted to impose liability on a waste generator who arranges for waste disposal by contract or agreement, but who never actually delivers the waste to a disposal facility. *See United States v. Wade*, 577 F.Supp. 1326, 1332 (E.D.Pa. 1983). CERCLA is a hastily-drawn statute quickly passed through a lame-duck Congressional session. *See* Developments, *Toxic Waste Litigation*, 99 Harv.L.Rev. 1458, 1465 & n. 1 (1986); *U.S. v. Price*, 577 F.Supp. 1103, 1107 (D.N.J. 1983); *United States v. Mottolo*, 605 F.Supp. 898, 902 (D.N.H. 1985) ("CERCLA has acquired a well-deserved notoriety for vaguely-drafted provisions and an indefinite, if not contradictory, legislative history."). Nonetheless, Congress intended broad judicial interpretation of CERCLA in order to give full effect to two important legislative purposes: to give the federal government the tools necessary for a prompt and effective response to hazardous waste problems and to force those responsible for creating hazardous waste problems to bear the cost of their actions. *See* S.Rep. No. 848, 96th Cong., 2d Sess. 13 (1980), *reprinted in* 1 A Legislative History of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund), at 320 (1983); H.R.Rep. No. 1016, 96th Cong., 2d Sess. pt. 1, 25 (1980), *reprinted in* 2 A Legislative History of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Superfund), at 56 (1983); *United States v. Reilly Tar & Chemical Corp.*, 546 F.Supp. 1100, 1122 (D.Minn. 1982).

After stripping section 107(a)(3) of its excess verbiage, Courts have generally held that liability under section 107(a)(3) requires proof of four basic elements: 1) that the generator disposed of hazardous substances; 2) at a facility which contains at the time of discovery hazardous substances of the kind the generator disposed; 3) there is a release or a threatened release of that or any hazardous substance; 4) which triggers the incurrence of response costs. *See United States v. Wade*, 577 F.Supp. 1326, 1333 (E.D.Pa 1983); *United States v. Conservation Chemical Co.*, 619 F.Supp. 162, 190 (W.D.Mo. 1985); *United States v. South Carolina Re-*

cycling and Disposal, Inc., (*"SCRDI"*) 14 Envtl.L.Rep. (Envtl. L.Inst.) 20272, 20274 (D.S.C. Feb. 23, 1984); *see also United States v. Ward*, 618 F.Supp. 884, 893-94 (E.D.N.C. 1985).

Courts have universally acknowledged that in enacting section 107 Congress created a strict liability scheme. *See New York v. Shore Realty Corp.*, 759 F.2d 1032, 1044 (2d Cir. 1985) (liability under CERCLA is unequivocally strict liability); *United States v. Conservation Chemical Co.*, 619 F.Supp. at 204; *United States v. Ward*, 618 F.Supp. at 893; *United States v. Northeastern Pharmaceutical and Chemical Co.*, ("NEPACCO") 579 F.Supp. 823, 844 (W.D.Mo. 1984); *SCRDI*, 14 Envtl.L.Rep. at 20274, *United States v. Chem-Dyne Corp.*, 572 F.Supp. at 805; *City of Philadelphia v. Stephan Chemical Co.*, 544 F.Supp. 1135, 1140 n. 4 (E.D.Pa. 1982). I am in accord with the conclusion of these courts. CERCLA section 101(32) defines CERCLA liability as being consistent with the liability standards governing section 311 of the Clean Water Act, 33 U.S.C. section 1321 (1982). *See* 42 U.S.C. section 9601(32) (1982). Courts have interpreted Section 311 of the Clean Water Act to define a standard of liability with fault. *See, e.g., United States v. LeBoeuf Bros. Towing Co.*, 621 F.2d 787, 789 (5th Cir. 1980); *Steuert Trans. Co. v. Allied Towing Corp.*, 596 F.2d 609, 613 (4thCir. 1979); *United States v. Tex-Tow, Inc.*, 589 F.2d 1310, 1313 (7th Cir. 1978); *Burgess v. M/V Tamano*, 564 F.2d 964, 982 (1st Cir. 1977), *cert. denied*, 435 U.S. 941, 98 S.Ct. 1520, 55 L.Ed.2d 537 (1978); *United States v. Bear Marine Services*, 509 F.Supp. 710, 714 (E.D.La. 1980). Moreover, the legislative history is clear that Congress understood judicial interpretations of section 311 to impose strict liability and intended that standard to be incorporated as the liability standard under CERCLA. *See* S.Rep. No. 848, 96th Cong., 2d Sess. 34 (1980), *reprinted in* 1 A Legislative History of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund), at 341 (1983) (S. 1480—the CERCLA bill in the Senate—represents an attempt to fill gaps left by other federal strict liability statutes—including section 311 of CWA—which respond to and compensate victims of hazardous substance release); 126 Cong. Rec. S14964 (daily ed. Nov. 24, 1980) (remarks of Sen. Randolph) ("[W]e have kept strict liability in the compromise, specifying the standard of liability under section 311 of the [CWA]; that is, strict liability."). Thus, if the plaintiff is able to prove at trial the statutory elements of section 107(a)(3), Olin may be held liable without proof of knowledge or intent; CERCLA section 107 is a strict liability scheme.

[Continued]

[2] [Continued]

C. *Defenses to Liability under CERCLA Section 107*

1. Statutory Defenses

CERCLA section 107(b) enumerates the only defenses to CERCLA liability provided within the statute itself. Only three statutory defenses are available to a defendant otherwise liable under CERCLA. Section 107(b) provides:

> There shall be no liability under sub-section (a) of this section for a person otherwise liable who can establish that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by—
>
> (1) an act of God;
>
> (2) an act of war;
>
> (3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant (except where the sole contractual arrangement arises from a published tariff and acceptance for carriage by a common carrier by rail), if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances, and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such acts or omissions; or (4) any combination of the foregoing paragraphs.

42 U.S.C. section 9607(b) (1982). In essence, the affirmative defenses outlined in section 107(b) will allow a defendant to evade liability if the release and damage are caused *solely* by an act of God, or war, or by acts of third parties outside a contractual relationship with the defendant. A defendant may only defend based on the acts of a third party if the defendant has exercised due care in the respect to the hazardous substances concerned *and* took precautions against any acts or omissions of the third party and any consequences foreseeably flowing from those acts or omissions. This final defense, known as "the third-party defense," incorporates general principles of vicarious liability into the CERCLA liability scheme. *See* Developments, *Toxic Waste Litigation*, 99 Harv.L.Rev. 1458, 1548 (1986).

The defenses provided in section 107(b) are very narrow defenses; they require that the release and damage be caused *solely* by acts of God, war, or acts of omissions of a third party. These

Rohm & Haas Company

It is clear that this major chemical company took every precaution in the disposal of its wastes; it was separated into categories, packed into 58 gallon metal, open-head drums ("lab packs")[3] cushioned with vermiculite and absorbent materials, and disposed of through a licensed transporter. During 1976-1977, the pertinent period here, it contracted with Jonas Waste Removal ("Jonas"), to transport its waste exclusively to licensed disposal sites in Pennsylvania and New Jersey with directions stating, "[d]isposal of these waste materials is not to be in violation of an ordinance, regulation or law of responsibility for safe delivery and disposal of the material after leaving the premises)." And as the defendant states, it is uncontradicted that at no time was any material consigned to Rhode Island. However, during this period approximately 4,800 fifty-five gallon lab packs were consigned to Jonas and the state claims 303 five-gallon drums of this total were found at the Picillo site; the defendant argues that this is an uncorroborated statement nowhere to be found in the record. The fact remains that this defendant agreed to have its materials removed. The record shows it "paid the State's contractor aproximately $32,000 as the costs for handling the removal of Rohm & Haas materials." Certainly this is an indication of the quantity of waste removed. The removal and identification of this material was with the assistance of a Mr. Joseph Pawlikowski of Rohm & Haas, who was the superior responsible for that company's waste disposal.

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affirmative defenses essentially serve to shift the burden of the proof of causation to the defendants. This causation scheme encourages defendants to mark and dispose of their hazardous wastes with the greatest care; the defenses discourage defendants from carelessly allowing their wastes to run into one large, unidentifiable morass at the waste site, confident in the knowledge that the government must identify the wastes and prove causation. *See id.* at 1544.

[3] Laboratory packs ("lab packs") are 55 gallon drums packed with smaller containers (e.g., vials, jars) surrounded and cushioned by an absorbent material such as vermiculite or "speedy dry."

In mitigation, the defendants point out that 20 drums, which were segregated in one area, were intact without any observable leakage. However, this was disputed by John Leo, an employee of the State Department of Environmental Management. The defendant also points to Mr. Leo's testimony that Rohm & Haas, "removed all of their toxic waste that could be removed." The defendant did not go far enough because Mr. Leo also stated, in answer to a question as to what was left, "[w]hich left the contaminated soil from the broken bottles that had leaked out into the pit from their lab packs. That, of course, was lost in the environment which would have added to the contmaination in the groundwater." He further said that he personally saw removed from the pit "at least four or five drums" containing liquid which was spilled because the drum heads were crushed and had holes on the side caused by the bulldozer. "They were eventually shown to be Rohm & Haas material . . . [t]hose drums were Rohm & Haas drums." One of the drums contained allyl alcohol, which is a flammable, extremely poisonous material; "[T]hey [representatives from Rohm & Haas] were shown the barrel that contained nothing but this allyl alcohol . . . this material is extremely poisonous . . . a class B poison and by DOT regulations as class B poison is extremely dangerous material."

The material spilled into the ground was removed as contaminated soil. Mr. Leo could not state what quantum of soil was contaminated by this defendant; though he did know the total amount of soil removed; but, "[h]ow much is actually responsible from Rohm & Haas or whatever other companies are involved I can't tell you. I mean we didn't proportion out the soil."

I accept the State's estimate as to the quantum of material found at the dump and that it was toxic hazardous waste. Accordingly, this defendant is liable to the state as set forth, *infra*.

Exxon Research and Engineering Company

The State contends that 15 Exxon drums were excavated; Mr. Leo so testified; however, he also acknowledged that the number was based on his recollection and not his records, which identified only one Exxon "lab pack"; this single drum was rusted and dented without any evidence of spillage. When pressed for records corroborating his testimony of 15 drums, he stated, "I cannot point to any one record. It's made up of film, photographs, my own visible . . . seeing barrels at the site, and everything else. No record was made . . . I was asked by the Attorney General's office to put together an estimation of the number of barrels found. That's what I did, and that was based on my records, the amount of material, my own recollection as being there on site for the number of barrels that were there." The culmination of his testimony was the acknowledgement that there were no corroborating records; the number 15 was based on his best recollection. The defendant developed, as it states in its Memorandum at 32, that "[i]ndeed, during his [Leo's] deposition in March 1985, Mr. Leo himself testified that he saw only one drum . . . the contents of which were identifiable to Exxon." Another witness, Alan Brodd, testified for the State. He was the site supervisor who was on the site on a daily basis during the excavation in question. He had "overall responsibility for the site safety and the day-to-day operation and actvities at the site." His duties required him to sample, analyze, and interpret results of such samplings and make judgments as to whether or not the materials were hazardous. He testified he saw twenty or thirty half pint or pint bottles that bore Exxon labels.

The State's reply to the foregoing is: "Although Mr. Brodd saw only one lag pack attributable to Exxon . . . Mr. Brodd's managerial position did not permit him to have the type of direct, regular involvement in the excavation activities over which John Leo had primary responsibility." Plaintiff's Reply Memorandum at 18.

Exxon utilized the services of a transporter licensed by the State of New Jersey and the Federal Government; in addition, Exxon personnel visited the disposal sites of its transporters to be assured of their adequacy. At one of the sites the transporter insured that the wastes were removed from their lab packs and incinerated; at this same site, procedures were employed to verify receipt of all the waste to be disposed of and incinerated. Exxon never deliberately sent any of its material to the Picillo site nor did it ever utilize any of the transporters who used the site.

I find Exxon employed every precaution to prevent the illegal and/or improper disposal of its waste. Nevertheless, I must also find that twenty or thirty bottles, as described *supra*, were found at the site. However, although there was testimony at trial that the Exxon materials were "probably flammable," no further proof of toxicity was offered. Accordingly, I find that the State has not met its burden of proving the material allegedly found by Brodd was hazardous within the meaning of CERCLA. Judgment must be entered for this defendant.

American Cyanamid

Mr. Leo testified that he believed or recalled that, "there were ten drums from American Cyanamid based on going through the records and personally being there and seeing the drums." He copied the data recorded on the labels of containers found at the site and contacted Dr. Ralph Wainwright, supervisor of waste disposal at American Cyanamid, who, using the code numbers found on the labels, identified the material as coming from their Agricultural Division, which "makes poisons and pesticides in New Jersey." Mr. Leo then talked to a Dr. Luke of American Cynanmid and, based upon that conversation and conversations with Dr. Wainwright, testified that, "based on what I had—based on the code numbers that I was giving them the material was poison 'B',

again, very toxic material [such as] experimental pesticides and toxins used in . . . veterinarian supplies for worms and so forth and cows and pigs and that the other material was a catalytic resin." A partial record was made of the day and date of these phone calls as well as of the code numbers. These records were made available to the defendants.

The plaintiff does not dispute the following facts:

During 1977, Ralph Wainwright was supervisor of industrial hygiene and safety at American Cyanamid and was responsible for disposal of wastes generated at its laboratory. All wastes were labeled with code names and generic descriptions. Wastes were sorted into categories at each laboratory and a form prepared accurately describing each waste and the container in which it was placed. Mr. Wainwright reviewed copies of these forms to assure that they were completed and the waste properly described. Once he was satisfied, the materials were collected and brought to a storage area where they were packed into 55 gallon steel drums to form lab packs, using vermiculite as an absorbant material. Each drum contained sheets showing precisely what materials were packed therein. Each drum contained compatible materials, e.g. flammables, liquids, solids, poisons, corrosives, etc. Each drum was labeled on the outside with information relating to the company and location, a bright symbol and writing to indicate the type of hazardous material, and the number of the drum. In sum, every effort was made to properly label and identify these drums and their contents. The drums were then manifested and picked up by a transporter.

During the period 1970-1977, American Cyanamid used one transporter extensively for lab pack material, Chemical Control Corporation of Elizabeth, New Jersey, and two others on certain occasions (water-reactive wastes and PCBs were handled specially). Pursuant to company

policy, Mr. Wainwright visited the Chemical Control facility to make sure that wastes were handled properly. He visited the site on three occasions between 1972 and 1977. Lab packs were to be incinerated. He inspected the incinerator. He inspected the licenses. He was satisfied that the facility was a proper one for the disposal of American Cyanamid wastes.

The state does not take issue with American Cyanamid's claimed diligence in the selection of its transporter. Nor, in fact, do I. Unfortunately for American Cyanamid, however, this line of argument gets it nowhere. As I ruled in *Violet*, 648 F.Supp. at 1290-93, and as I reaffirm *infra*, the strict liability scheme of CERCLA imposes liability upon generators even though they may have taken precautions in selecting what appeared to be a responsible transporter. Moreover, as a purely factual matter, it is not at all clear that American Cyanamid was as vigilant as it contends. American Cyanamid had an exclusive contract with the Chemical Control facility to handle all of its hazardous waste, including its PCB waste. It continued to utilize the services of this organization despite the presence of an excessive number of drums on the Chemical Corporation site, which in the words of Ralph Wainwright who, as an American Cyanamid Company's supervisor of industrial hygiene and safety, was responsible for disposal of wastes, "bothered everybody". In addition, American Cyanamid Company made no further inquiries concerning Chemical Control despite the fact that Mr. Wainwright was aware of an incident in which Chemical Control was linked to barrels of waste which had been improperly disposed of on a vacant lot in Newark, New Jersey.

I find that this defendant is responsible for ten drums of toxic hazardous material found at the site. Accordingly, this defendant is liable to the State as set forth, *infra*.

Olin Corporation

The following facts are undisputed:

Richard S. Henley, manager of regional environmental affairs for Olin, visited the Picillo site on June 22, 1982. At this time, Mr. Leo showed him five 55-gallon drums as having come from Olin. All but one of these drums either had a label of a product manufacturer addressing the drum to Olin, or the marking "Poly-G," an Olin trade name. Mr. Henley was also shown a five gallon pail with a label designation "fatty acid" and a small cardboard container which contained four 4-inch vials—intact and not leaking. Mr. Henley did not identify the contents of other drums or containers. No PCBs (Polychlorinated Biphenals) at the site are attributable to Olin.

I conclude that Olin was the generator of the contents of the five fifty-five gallon drums, the five-gallon pail, and the cardboard container.[4] The question still pending is whether the plaintiff has carried the burden of proving the material was hazardous; all that the plaintiff offers on this point is its statement in its brief that "[t]he degree of toxicity of the individual waste may not have been determined but its status as a hazardous waste was confirmed by Mr. Leo through the code numbers on the waste and his discussions with Defend-

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[4] I do not find the reasoning, and indeed the briefs, without confusion as to precisely what amount of material can be attributed to Olin. In addition to the 5 fifty-five gallon drums, there appears to have been another barrel designated as barrel 115 which contained a one gallon container; a cardboard box and a one quart container —all intact and contents unknown. There is reference also to a one pint container—intact; another seven drums labelled as containing "POLY-G," "ISOCYANATE RESIN," "RESINOUS MATERIALS," or "TDI-80."

I note that the facts developed at the hearing are not precisely as recited in my Opinion and Order of November 20, 1986, ruling on defendant Olin's motion for partial summary judgment. These facts are based on the evidence as developed at trial and are controlling.

ant representatives." The pertinent portion of the transcript reference merely reflects Mr. Leo's testimony that though samples of the materials were taken, no analysis was done and he could not identify the contents of the drums. When asked how, absent any analysis, he could label the material toxic, he replied, "[b]ased on the information on the outside of the label . . . on the drum, and based on conferring with Olin representatives when they came out to the site to look at some of the drums."

As against this, the defendant presented the testimony of Dr. Steven Barber, Manager of Toxicology at Olin who stated that polyol, which was found in the 55-gallon drums, is not a hazardous substance as defined in section 101(14) of CERCLA. Dr. Barber also testified that Taluene diisocyanate (TDI), when exposed to water, forms polyurea, which is not a hazardous substance as defined under CERCLA, and that fatty acids are also not a hazardous substance under CERCLA.

This testimony was not refuted. I cannot accept Mr. Leo's general statement as sufficiently probative to find that Olin's material was hazardous. Accordingly, I find that the State has failed to prove that the Olin materials were hazardous substances under CERCLA.

Judgment must be entered for this defendant.

Hydron Laboratories, Inc.

This defendant generated a sodium aluminum hydride product known as Vitride which is a hazardous toxic material. In all of 1977, this defendant had a total of 28 barrels of its sodium aluminum hydride waste delivered to Chemical Waste Removal, Inc., a transporter for disposal. Twenty-one of these barrels were found at the site in question. The testimony is quite clear that nineteen of the barrels were intact, i.e., not leaking, and that two had pin holes which caused miniscule leaking of a few drops. The plaintiff argues that "several of the

Hydron barrels suffered perforations ranging in size from pin hole-leaks to a hole the diameter of a dime" but offers no transcript reference supporting this statement. Mr. Leo's cross-examination is of no help to the plaintiff, rather it corroborates the defendant's contention of no leakage excepting for the pin holes. And the testimony established that "emission through small 'pinhole' leaks in drop quantities would result in evaporation so quickly that it could not pose any threat." I find that twenty-one barrels of Hydron toxic hazardous waste with miniscule leaking were found at the site.

I find this defendant did not contribute to the Picillo dump contamination but that the Hydron barrels posed a threatened release of the hazardous substance they contained. I find them liable.

IV. SCOPE OF LIABILITY

It is now quite well settled that liability under CERCLA is joint and several. *See, e.g., United States v. South Carolina Recycling and Disposal, Inc.*, 653 F.Supp. 984, 992 (D.S.C.1986); *Idaho v. Bunker Hill Co.*, 635 F.Supp. 665, 676 (D.Ind.1986). If the injury is indivisible, then each defendant is responsible for the entire cost. *United States v. Chem-Dyne Corp.*, 572 F.Supp. 802, 811 (S.D. Ohio 1983). If, however, the injury is divisible or there is nonetheless a reasonable basis for division according to the contribution of each, then liability will be apportioned accordingly. Restatement (Second) of Torts sections 433A & 881 (1976). The defendant carries the burden of demonstrating that the injury is divisible or otherwise subject to apportionment. *United States v. Dickerson*, 640 F.Supp. 448, 450 (D.Md.1986).

The defendants assert that there are two supportable ways to apportion liability. The first involves segregating the Picillo site essentially into four separate and distinct harms correlating with the four stages of the clean

up. The second involves focusing on the volumetric contribution of each defendant as indicated by the number of drums attributable to each found at the site.

The cleanup of the Picillo site began in 1979 and lasted until 1982. As this litigation proceeded, the four years of excavation became known as four separate "phases": phase O represented the work completed in 1979, phase I represented the work completed in 1980, and so on. Each phase, moreover, involved work on different areas of the site. During phase I, for example, which spanned 1980, a trench in the northeast area of the site was excavated. Phases II and III, which followed, involved excavation of trenches in the northwestern, western, and southern areas of the site. The state retained different contractors for each phase.

The defendants now urge that liability should be apportioned according to these four separate phases. They contend, for example, that because neither Rohm & Haas nor American Cyanamid drums were discovered during phases O or I, the costs of cleanup during these phases should be excluded from any liability calculation and the actual liability to these defendants should be reduced accordingly.

I have trouble with this argument. The fact that the cleanup of the Picillo site proceeded in four stages does not necessarily render the underlying injury divisible. In fact, the manner in which the state conducted the cleanup, whether in one, two, or a hundred stages, is practically and theoretically immaterial to the question of whether the devastated state of the Picillo property can be divided into distinct harms.

In fact, the defendants acknowledge in their brief that this is an untenable basis for apportioning liability. After suggesting that dividing liability among the phases is a rational way to apportion costs, they in fact reject this method when they describe its application. For example, defendants refer to phase III, during which 3300 drums of toxic waste were discovered, and contend that of that

number, only 24 are attributabel to Rohm & Haas. They contend that since that number constitutes .07% of the total, Rohm & Haas should be liable for .07% of the costs Phase III. It is clear from this that the various phases of the cleanup are virtually irrelevant to the proffered apportionment calculation and the defendants seek to apportion liability solely on the basis of the number of drums found at the site.

Finally, dividing the costs solely on the basis of which phase the defendant's waste was discovered is inconsistent with recent decisions concerning the scope of liability under CERCLA. As one court held:

> A CERCLA defendant's liability under section 107(a) is not restricted to the cleanup of those hazardous substances directly attributable to it. Rather, once the Government has proven that a defendant's waste is present at a site and that the waste contains hazardous substances, the defendant may be held jointly and severally liable for the entire cost of removal and remedial actions required at the site not inconsistent with the National Contingency Plan.

United States v. New Castle County, 642 F.Supp. 1270, 1276 (D.Del.1986). The defendant's second proffered basis for apportionment, which, it appears, is implicit in the first, is to divide liability according to the number of drums found at the site that can be attributed to the defendants. They argue that a defendant who has contributed, say, one per cent of the total number of drums should be liable for one per cent of the costs of cleanup.

There is no question that the number of drums may be an appropriate criterion for apportioning liability if all of the drums contained identical wastes. *See Developments, Toxic Waste Litigation*, 99 Harv.L.Rev. 1458, 1528 (1986). In such a case, there is "the reasonable assumption that the respective harm done is proportionate to that number." Restatement (Second) of Torts section

433A, comm. d (1976). However, "the volume of waste of a particular generator is not an accurate predictor of the risk associated with the waste because the toxicity or migratory potential of a particular substance generally varies independently of the volume." *Chem-Dyne Corp.*, 572 F.Supp. at 811.

Thousands of dented and corroded drums containing a veritable potpourri of toxic fluids were discovered at the Picillo site. Many were found intact but many had ruptured spilling chemicals into the soil. Some were discovered empty, having already discharged their contents. I find that it is simply impossible to determine which defendant's waste contributed in what specific manner to the releases and continuing threat of further releases. Under these circumstances, where different substances possessing different qualities of toxicity and migratory potential commingle, there is a synergistic impact upon the environment that necessitates a finding that the consequent injury is indivisible. *See United States v. Stringfellow*, 661 F.Supp. 1053, 1060 (C.D.Cal.1987); *United States v. South Carolina Recycling and Disposal, Inc.*, 653 F.Supp. 984, 994 (D.S.C.1984). I therefore hold that the injury to the Picillo site is indivisible and the defendants are jointly and severally liable for the costs of the cleanup.

I am not insensitive to the possible unfairness involved in holding a few relatively small contributors jointly and severally liable for the entire harm. Indeed, there is no question that in CERCLA actions, like other actions involving joint tortfeasors, a court may consider equitable factors to apportion damages and mitigate the effects of joint and several liability. I believe, however, that issues of fairness and equitable apportionment may be more properly addressed in a subsequent contribution action, which apparently Rohm & Haas and American Cyanamid have already begun. *See* Restatement (Second) of Torts section 881(1) & (2) ("equitable shares of the liability with respect to an indivisible injury are appropriately resolved in an action for contribution").

This is consistent with CERCLA's key objective of "facilitat[ing] the prompt cleanup of hazardous dumpsites by providing a means of financing both governmental and private responses, and by placing the ultimate financial burden upon those responsible for the danger." *City of Philadelphia v. Stephan Chemical Co.*, 544 F.Supp. 1135, 1142-43 (E.D.Pa.1982). By delaying thorny considerations of equitable apportionment to a later contribution proceeding, the government is provided immediate funds after the initial liability hearing to take prompt remedial action at the earliest opportunity. Garber, *Federal Common Law of Contribution Under the 1986 CERCLA Amendments*, 14 Eco.L.Q. 365, 369 (1987). In most instances, immediate response to potential disasters caused by seepage and migration can forestall the accrual of considerably higher compensation costs. Note, *Allocating the Costs of Hazardous Waste Disposal*, 94 Harv.L.Rev. 584, 587 (1980). As one court has observed:

> It is helpful to note that the purpose of CERCLA is environmental protection, including protection of public health and safety. Imposing joint and several liability carries out the legislative intent by ensuring that responsible parties will fulfill their obligations to clean up the hazardous waste facility. The court has discretion to use equitable factors in apportioning damages in order to mitigate the hardships of imposing joint and several liability upon defendants who have only contributed a small amount to a potentially large indivisible harm. However, the court's discretion in apportioning damages among the defendants during the contribution phase does not effect the defendant's liability.

Stringfellow, 661 F.Supp. at 1060; *see also United States v. New Castle*, 642 F.Supp. 1258, 1277 (D.Del.1986) ("CERCLA places the burden of apportioning blame on the defendants by way of actions for contribution and apportionment.").

V. DEFENSES

Unclean Hands

In *Violet*, I held that because plaintiffs in CERCLA actions seek the equitable remedy of restitution, defendants were entitled to raise equitable defenses. 648 F.Supp. at 1294-95. The defendants argue in their post-trial brief that the first stage of the Picillo cleanup was mishandled and that the doctrine of unclean hands consequently bars the state from recovering the cost of the cleanup.

The evidence presented during trial revealed that the so-called phase I excavation was characterized by inadequate record-keeping and possibly improper removal methods, which resulted in excess spillage. Testimony indicated that the state's contractor for phase I, Jet Line Services, Inc. (Jet Line), a novice at this sort of venture, used backhoes with teeth to excavate the drums, often puncturing the drums and causing their contents to spill onto the ground. Testimony by one of the defendant's experts indicated that more appropriate methods, including the use of barrel grapplers, which have been available for decades, could have prevented much of the spillage. There was also evidence that Jet Line was initially compensated on a per-drum basis, encouraging haste without regard to safety and conservation. Only after many drums had been destroyed in the process did the State finally amend the contract to force Jet Line to employ less destructive methods. Finally, if records were kept during phase I, and it is conceivable that as a result, some generators are not now before this court.

In defense, the state points to testimony that spillage is inevitable in any cleanup project. One of the state's employees testified that such hazardous waste cleanup projects were just beginning at the time phase I was conducted and thus the "state-of-the-art was at a fledgling level." As to this contract with Jet Line, the state contends—and testimony supports its contention—that it agreed to Jet Line's per-drum compensation scheme be-

cause an independent consulting corporation had estimated that there were only a few hundred barrels of waste to be removed. Later, when it became clear that there were thousands more barrels than anticipated, the state amended the compensation schedule and threatened to close down the project unless Jet Line improved its methods.

The doctrine of unclean hands is a recognition of the maxim that "he who seeks equity must do equity." Rather than constituting a defense to liability in the traditional sense, the doctrine is applied in the public interest and to protect the integrity of the court by foreclosing the possibility that the court will assist a wrongdoer. As one court described the doctrine:

> In the interests of right and justice the court should not automatically condone the defendant's infractions because the plaintiff is also blameworthy, thereby leaving two wrongs unremedied and increasing the injury to the public. Rather the court must weigh the substance of the right asserted by the plaintiff against the transgression which, it is contended, serves to foreclose that right. The relative extent of each party's wrong upon the other and upon the public should be taken into account, and an equitable balance struck.

Republic Molding Corp. v. B.W. Photo Utilities, 319 F.2d 347, 350 (9th Cir.1963). Evidence of some misconduct by the plaintiff, therefore, is not an automatic bar to recovery; rather, a district court has "wide latitude to compare the cleanliness of the parties 'hands'." *United States v. Zenon*, 711 F.2d 476, 478 (1st Cir.1983) *see also Precision Instrument Mfg. Co. v. Automotive Maintenance Machinery Co.*, 324 U.S. 806, 815, 65 S.Ct. 993, 997, 89 L.Ed. 1381 (1945) (the unclean hands doctrine "necessarily gives wide range to the equity courts use of discretion in refusing to aid the unclean litigant. It is not bound by formula or restrained by any limitation that

tends to trammel the free and just exercise of discretion.").

After carefully considering the state's conduct during the early stages of the cleanup, I conclude that it does not so soil the state's hands that recovery is barred in this action. My conclusion is informed not only by a balancing of the equities in this case, but also by the simple fact that courts have uniformly held that mere negligence on the part of the plaintiff is insufficient to bar relief under the unclean hands doctrine. *See Shearson/American Express, Inc. v. Mann*, 814 F.2d 301, 307 (6th Cir.1987); *Pfizer, Inc. v. Int'l Rectifier Corp.*, 685 F.2d 357, 359 (9th Cir.1982), *cert. denied*, 459 U.S. 1172, 103 S.Ct. 818, 74 L.Ed.2d 1016 (1983); *International Union, Etc. v. Local Union No. 589*, 693 F.2d 666, 672 (7th Cir.1982); *Bresh v. Braecklein*, 133 F.2d 12, 14 (10th Cir.1943). Therefore, even if I were to conclude that the state was negligent during the initial stage of the cleanup, that conclusion would be insufficient to trigger application of the doctrine of unclean hands.

Third-Party Defense

CERCLA section 107(b), in relevant part, provides:

> There shall be no liability under subsection (a) of this section for a person otherwise liable who can establish that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by—
>
> . . . . .
>
> (3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant. . . .

42 U.S.C. section 9607(b). A defendant may invoke this defense if he can also show that he "exercised due care

with respect to the hazardous substances concerned and took precautions against any acts or omissions of the third party and any consequences forseseeably flowing from those acts or omissions." *Violet*, 648 F.Supp. at 1293; *see* 42 U.S.C. section 9607(b)(3)(a)-(b).

The defendants argue that they are entitled to this defense because they consigned their wastes to licensed waste transporters and there is no evidence that these transporters had any contact with the Picillo site. Therefore, they contend, "whatever party was responsible for transporting the [defendants'] waste to the Picillo site had no direct relationship with [the defendants] and there is no evidence of any other relationship, indirect or otherwise."

I find that the defendants have failed to meet the initial showing that the release was caused solely by a party that did not have either a direct or indirect contractual relationship to the defendants. The simple fact is that during the time the defendants consigned their waste to licensed disposers, some of that waste, in indentifiable containers, came to rest at the Picillo site. The defendant's argument that there was no evidence linking the disposers to the site or that the defendants had any relationship with whomever actually deposited the waste there simply confuses the nature of its burden under the third-party defense. As I stated in *Violet*, the third-party defense "essentially serve[s] to shift the burden of proof of causation to the defendants." 648 F.Supp. at 1293. The defendants must demonstrate by a preponderance of the evidence that "*a totally unrelated third party* is the *sole* cause of the release." *Stringfellow*, 661 F.Supp. at 1053; *see Dedham Water Co. v. Cumberland Farms Dairy, Inc.*, 805 F.2d 1074, 1079 n.10 (1st Cir. 1986). Absent any evidence along these lines, I must conclude that it is equally likely that either the licensed disposers or a subcontractor of the disposers deposited the waste at the site.

The defendant's argument appears to be a repackaging of the argument that a generator can escape liability merely by showing that it had in fact arranged to have its waste dumped elsewhere. This argument, however, was not only rejected in *Violet*, *see* 648 F.Supp. at 1291, but by other courts as well. *See, e.g., United States v. Ward*, 618 F.Supp. 884, 895 (E.D.N.C.1985) (section 107 does not require that the arrangement include knowledge of the ultimate disposal site); *Missouri v. Independent Petrochemical Corp.*, 610 F.Supp. 4, 5 (E.D. Mo.1985) (generators may be liable for costs at site though it expressly arranged to have its wastes delivered to another facility); *United States v. Conservation Chemical Co.*, 619 F.Supp. 162, 234 (W.D.Mo.1985) (same).

National Contingency Plan

Persons held liable under section 107(a) of CERCLA are responsible for "all costs of removal or remedial action incurred . . . not inconsistent with the National Contingency Plan." 42 U.S.C. 9607(a). The Plan is set out in 40 C.F.R. Part 300, and in effect requires that the cleanup measures be cost effective. 42 U.S.C. 9605(7); 40 C.F.R. section 300.68(j); *see J.V. Peters & Co., Inc. v. Administrator, E.P.A.*, 767 F.2d 263, 265 (6th Cir.1985); *United States v. United Nuclear Corp.*, 610 F.Supp. 527, 529 (D.N.M.1985).

Defendants argue that the state has failed to prove that its actions were consistent with the Plan. Specifically, they allege that Phase I of the cleanup was characterized by sloppy and inefficient practices that were not cost effective.

As an initial matter, I hold that when a state government is pursuing response costs under CERCLA, the burden of proving that the cleanup was inconsistent with the Plan rests with the defendant. As one district court persuasively reasoned:

> Defendants argue that the plaintiff failed to prove that the costs incurred were reasonable and "not inconsistent with the national contingency plan." Initially, the Court finds that the burden of proving inconsistency with the national contingency plan was that of the defendants. This conclusion is evidence from the language of the statute. To give meaning to every term in the statute, the Court reads the insertion of the word "not" immediately prior to "inconsistent" to mean that the defendants are presumed liable for all response costs incurred unless they can overcome this presumption by presenting evidence of inconsistency. The content of section 107(a)(4)(B) lends support to this conclusion in stating that responsible parties are liable for "any other costs of response incurred by any other person *consistent with* the national contingency plan." (emphasis added) On its face, section 107(a)(4)(B) intends that a different standard apply to cost recovery by non-governmental entities and that such entities must affirmatively show that their actions were consistent.
> . . .

United States v. Northeastern Pharmaceutical and Chemical Co., 579 F.Supp. 823, 850-51 (D.Mo.1984); *see United States v. South Carolina Recycling and Disposal, Inc.*, 653 F.Supp. 984, 1009 (D.S.C.1986).

It is also clear from the statute that variance from the Plan does not provide a complete defense to liability. By its own terms, Section 107(a) bars "costs" that are inconsistent with the Plan, not "actions." *See, e.g., Lone Pine Steering Comm. v. United States*, 600 F.Supp. 1487, 1499 (D.N.J.), *aff'd* 777 F.2d 882 (3d Cir.1985). Therefore, the defendants have the burden of demonstrating that the clean-up, because of some variance from the Plan, resulted in demonstrable excess costs for which they should not be responsible.

The trouble with the defendant's claim in this regard is that while they have presented evidence that the use of barrel grapplers, for example, or the employment of a different compensation scheme for the contractor, would have prevented some of the spillage that occurred during Phase I, they have not presented any evidence addressing how much of the recovery costs incurred by the state, as a result, should be precluded. While I am not unsympathetic to the defendants' plight, I refuse to speculate as to how much recovery is too much. Accordingly, I find that the defendants have failed to prove that certain costs were inconsistent with the National Contingency Plan.

Retroactive Application of CERCLA

The defendants argue that the releases for which they are now being held to answer occurred prior to 1980, the effective date of CERCLA. They contend that to hold them liable for such conduct constitutes retroactive application of a statute in violation of due process. This argument has been thoughtfully analyzed and rejected by numerous courts. *See United States v. South Carolina Recycling and Disposal, Inc.*, 653 F.Supp. 984, 996-98 (D.S.C.1986); *United States v. Shell Oil Co.*, 605 F.Supp. 1064, 1072-73 (D.Col.1985); *United States v. Northeastern Pharmaceutical and Chemical Co., Inc.*, 579 F.Supp. 823, 839-43 (D.Mo.1984); *State ex rel. Brown v. Georgeoff*, 562 F.Supp. 1300, 1309-1314 (N.D.Ohio 1983). I adopt the reasoning and conclusion of these courts and hold that liability for response costs under CERCLA for releases which occurred prior to 1980 does not offend due process.

VI. SETTLEMENTS AND FUTURE LIABILITY

Effect of Settlements

On the day designated for trial, the State and the United States Environmental Protection Agency, a nonparty, settled with numerous potential defendants. That

settlement included a $2.3 million cash settlement to be applied to the past costs of the entire clean-up, as well as commitments from the settling defendants to perform future remedial work valued at $3.5 million. Of this, the State was to receive twenty-five per cent of the cash settlement, or $575,000.00.[5] The State also independently settled with other defendants for $46,500, bringing the total amount of settlement proceeds to the state to $621,500.00.

A provision of the 1986 SARA amendments provides:

> A person who has resolved its liability to the United States or a State in an administrative or judicially approved settlement shall not be liable for claims for contribution regarding matters addressed in the settlement. Such settlement does not discharge any of the other potentially liable persons unless its terms so provide, but it reduces the potential liability of the others by the amount of the settlement.

42 U.S.C. section 9613(f).

I conclude that under the express language of the statute the total liability for past response costs must be reduced by the amount the state received in cash settlement, i.e., $621,500.00. Therefore, Rohm & Hass, American Cyanamid and Hydron are liable for past response costs in the amount of $991,937.30.

The settlement also included a commitment by the settling defendants to perform future remedial work at the site. This work was valued at $3.5 million and involves the removal of the three piles of soil totaling 6,500 cubic yards which had been found to contain PCB's and phenols. The defendants contend that the dollar value of this settlement arrangement must be applied to reduce their past response cost liability because there was no

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[5] The state used the figure $565,625.00 in its brief. I assume that this is a typographical error since 25% of 2.3 million is $575,000.00.

proof that the PCB pile constituted a hazardous waste that must be removed from the Picillo site. They point out, for example, that there was uncontradicted testimony that the average concentration of the PCB pile was only about 36 parts per million and that under applicable state and federal regulations removal is not required below concentrations of 50 parts per million. Therefore, they argue, since removal of these piles is not actually required by law, the value of the agreed-upon removal, $3.5 million, must be applied to the response cost, thereby in effect satisfying all of the state's clean-up costs.

I reject this argument for the simple reason that the state's success in negotiating a settlement as to the PCB and phenol piles at the site is irrelevant to the costs incurred during the initial excavation of the numerous drums and contaminants during the four stages of the cleanup. There is no question that a CERCLA plaintiff may settle with other potentially responsible parties for particular remedial action that is distinct from other response costs. *See United States v. Northeastern Pharm. & Chem. Co.*, 579 F.Supp. 823, 831-32 (W.D.Mo.1984). Moreover, I fail to see why the fact that the settling defendants may not have been shown ultimately to be responsible for removing the contaminated soil piles has any significance. As one court confronted with a similar issue put it:

> Of course, the future may ultimately reveal that the settling generators have compensated the federal government for claims on which the government would not have prevailed. This is simply the risk inherent in all settlements.

United States v. Wade, 577 F.Supp. 1326, 1337 (E.D.Pa. 1983).

Declaratory Judgment As To Future Liability

The state seeks a declaratory judgment seeking entitlement to recover its future response costs associated with

the Picillo site. It argues that toxic chemicals have been released into the groundwater and that the EPA is currently conducting extensive testing as to any possible damage that would require response costs.

I believe that this is an appropriate case for declaratory judgment. The issues have been firmly established and there is a real, present controversy between the plaintiff and defendants. *See C. Wright & Miller, Federal Practice and Procedures* section 2759 (2d ed. 1983); *Conservation Chem. Co.*, 619 F.Supp. at 211. Further, the courts are unanimous that declaratory judgments as to future removal costs are consistent with CERCLA's purpose of encouraging prompt, remedial action. *See e.g., id.* at 211-12; *Northeastern Pharm. & Chem. Co.*, 579 F.Supp. at 852-53; *Georgeoff*, 562 F.Supp. at 1316.

Accordingly, I conclude that the defendants are jointly and severally liable for all future costs of removal or remedial action incurred by the state relative to the Picillo site that are not inconsistent with the National Contingency Plan. This ruling includes any costs associated with the removal of the contaminated soil piles which the state may incur despite commitments by the settling defendants to remove the piles. I recognize that defendants have argued forcefully that they did not contribute PCB's or phenols to the Picillo site. However, because I have ruled that the defendants are jointly and severally liable for the Picillo disaster, it follows that they are liable for all response costs associated with it. *See New Castle County*, 642 F.Supp. at 1319 (a CERCLA defendant's liability, once it is found that the injury is indivisible, "is not restricted to the cleanup of those hazardous substances directly attributable to it.").

VII. CONCLUSION

In conclusion, I hold that Rohm & Haas, American Cyanamid, and Hydron are jointly and severally liable for past response costs totalling $991,937.30. I also hold that these defendants are jointly and severally liable for all future costs of removal or remedial action incurred by the state relative to the Picillo site that are not inconsistent with the National Contingency Plan; this includes any costs associated with the removal of contaminated soil piles, *supra* Section VI, which the state may incur despite commitments by the settling parties to remove the piles.

The plaintiff will prepare an order in accordance with this opinion.

APPENDIX C

UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

No. 88-1551

JAMES E. O'NEIL in his capacity as Attorney General for the State of Rhode Island,
Plaintiff, Appellee,

v.

WARREN V. PICILLO, SR., *et al.*,
Defendants, Appellees,

AMERICAN CYANAMID COMPANY AND ROHM AND HAAS COMPANY,
Defendants, Appellants.

JUDGMENT

Entered: August 21, 1989

This cause came on to be heard on appeal from the United States District Court for the District of Rhode Island, and was argued by counsel.

Upon consideration whereof, It is now here ordered, adjudged and decreed as follows: The judgment of the district Court is affirmed. Costs to appellees.

By the Court:

FRANCIS P. SCIGLIANO
Clerk

[cc: Messrs. Sherman, and Powers]

APPENDIX D

EXHIBIT NO. GD-M-21

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF RHODE ISLAND

C.A. No. 83-0787-P

JAMES E. O'NEIL in his capacity as Attorney General for the State of Rhode Island

v.

WARREN V. PICILLO, SR., *et al.*

STIPULATION

It is hereby stipulated by the parties that the Court may assume for the purposes of the causes now on trial between the parties hereto that the number of drums received by Scientific Chemical Processing, Inc. ("SCP"), during the time period January 1977 through October 1977, from the individual generators listed below, are substantially as follows:

American Hoescht Corporation	47
American Standard	29
Bermar Manufacturing Corp.	60
E.I. Dupont	203
Grumman	43
Mobay/Harmon	80
Monsanto	39
GAF	778
Schenectedy	2368
Ashland Chemical	3572

E.R. Squibb & Sons Inc.	20
Transco Products Co.	4
Ganes Chemical	202
Revlon	282
Pan Chemical Corp.	72
Armstrong Cork Co.	909
General Electric	412
Air Products	41
Custom Chemical	153
Patterson-Sargent Textron	180

It is further stipulated that the U.S. Environmental Protection Agency is conducting an investigation as to the SCP drums. At present, the preliminary investigation suggests, on the basis of information currently available and subject to further review, that approximately 6,800 of the above-enumerated drums were transported from SCP by the Capuanos.

This Stipulation and the information contained herein are not and shall not be deemed binding upon any other person, entity or party, or the undersigned parties in any other litigation or cause whatever.

In entering into this Stipulation, plaintiff in this cause in no way waives its assertion that the standard of liability for the claims asserted is joint and several.

5/15/87
Date

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APPENDIX E

Section 107 of CERCLA, 42 U.S.C. § 9607, provides in pertinent part:

§ 9607. Liability

(a) Covered persons; scope; recoverable costs and damages; interest rate; "comparable maturity" date

Notwithstanding any other provision or rule of law, and subject only to the defenses set forth in subsection (b) of this section—

(1) the owner and operator of a vessel or a facility,

(2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances, and

(4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person, from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance, shall be liable for—

(A) all costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe not inconsistent with the national contingency plan;

(B) any other necessary costs of response incurred by any other person consistent with the national contingency plan;

(C) damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such a release; and

(D) the costs of any health assessment or health effects study carried out under section 9604(i) of this title.

The amounts recoverable in an action under this section shall include interest on the amounts recoverable under subparagraphs (A) through (D). Such interest shall accrue from the later of (i) the date payment of a specified amount is demanded in writing, or (ii) the date of the expenditure concerned. The rate of interest on the outstanding unpaid balance of the amounts recoverable under this section shall be the same rate as is specified for interest on investments of the Hazardous Substance Superfund established under subchapter A of chapter 98 of Title 26. For purposes of applying such amendments to interest under this subsection, the term "comparable maturity" shall be determined with reference to the date on which interest accruing under this subsection commences.

(b) Defenses

There shall be no liability under subsection (a) of this section for a person otherwise liable who can establish by a preponderance of the evidence that

the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by—

(1) an act of God;

(2) an act of war;

(3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant (except where the sole contractual arrangement arises from a published tariff and acceptance for carriage by a common carrier by rail), if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances, and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such acts or omissions; or

(4) any combination of the foregoing paragraphs.

Section 113 of CERCLA, 42 U.S.C. § 9613, provides in pertinent part:

§ 9613. Civil proceedings

(f) Contribution

(1) Contribution

Any person may seek contribution from any other person who is liable or potentially liable

under section 9607(a) of this title, during or following any civil action under section 9606 of this title or under section 9607(a) of this title. Such claims shall be brought in accordance with this section and the Federal Rules of Civil Procedure and shall be governed by Federal law. In resolving contribution claims, the court may allocate response costs among liable parties using such equitable factors as the court determines are appropriate. Nothing in this subsection shall diminish the right of any person to bring an action for contribution in the absence of a civil action under section 9606 of this title or section 9607 of this title.

(2) Settlement

A person who has resolved its liability to the United States or a State in an administrative or judicially approved settlement shall not be liable for claims for contribution regarding matters addressed in the settlement. Such settlement does not discharge any of the other potentially liable persons unless its terms so provide, but it reduces the potential liability of the others by the amount of the settlement.

(3) Persons not party to settlement

(A) If the United States or a State has obtained less than complete relief from a person who has resolved its liability to the United States or the State in an administrative or judicially approved settlement, the United States or the State may bring an action against any person who has not so resolved its liability.

(B) A person who has resolved its liability to the United States or a State for some or all of a response action or for some or

all of the costs of such action in an administrative or judicially approved settlement may seek contribution from any person who is not party to a settlement referred to in paragraph (2).

(C) In any action under this paragraph, the rights of any person who has resolved its liability to the United States or a State shall be subordinate to the rights of the United States or the State. Any contribution action brought under this paragraph shall be governed by Federal law.

* * * *

Article I, section 9, clause 1 of the United States Constitution provides in pertinent part:

> No Bill of Attainder or ex post facto Law shall be passed.

Amendment V to the United States Constitution provides in pertinent part:

> No person * * * shall be deprived of life, liberty, or property, without due process of law * * *.

APPENDIX F

STATEMENT PURSUANT TO SUPREME COURT RULE 28.1

The following entities are subsidiaries or affiliates of petitioner American Cyanamid Company:

American Melamine Industries (a partnership)
Applied Solar Energy Corporation
Arizona Chemical Company
Arizona Chemical Overseas Corporation
Arizona Chemical Service Corp.
Bionet, S.A.
Biotechnology Research and Development Corp.
B. Braun-Dexon GmbH
B. Braun-Dexon (Portugal) Produtos Hospitalares Limitada
B. Braun-Dexon, S.A.
B.T.I. Chemicals Limited
Burford Fertilizers Limited
Cardiac Devices Company (a partnership)
Ceresdale Fertilizers Limited
Chemacryl Plastics Limited
Colfax Laboratories (India) Private Limited
Colorim Systems (a partnership)
Criterion Catalyst Company
Cyanamid Aerospace Products Limited
Cyanamid Australia Pty. Limited
Cyanamid Chile Limitada (Sociedad Industrial y Comercial Cyanamid Chile Limitada)
Cyanamid Chimica Italiana S.r.l.
Cyanamid France
Cyanamid GmbH & Co. Grundstrucks KG
Cyanamid Holdings Company
Cyanamid Iberica, S.A.
Cyanamid Importadora E Exportadora Ltda.
Cyanamid India Limited

Cyanamid Investments of Australia Ltd.
Cyanamid Investimentos Ltda. (Cyvest)
Cyanamid Italia S.p.A.
Cyanamid-Ketjen Katalysator B.V.
Cyanamid of Great Britain Limited
Cyanamid (Pakistan) Limited
Cyanamid (Portugal) Limitada
Cyanamid Property Limited
Cyanamid Quimica do Brasil Ltda.
Cyanamid Taiwan Corporation
Cyanamire S.r.l.
CYRO Industries (a Partnership)
D Aircraft Products, Inc.
Durachemie GmbH & Co. KG
Dyno Cyanamid, A.S. & Co.
Dyno Cyanamid, K.S
Dyno Cyanamid B.V.
Dyno Cyanamid C.V.
Esterfarm Laboratori Farmaceutici S.r.l.
Eximp, S.A.
Irbi, S.p.A.
John E. Slinger Limited
Kent County Fertilizers Limited
Laboratoires Lederle S.A.
Laboratoires Novalis LNC
Laboratorios Sobrino S.A.
Laminate Industries (Proprietary) Limited
Langford, Inc.
Langford Laboratories Inc.
Lederle (Japan), Ltd.
Lederle Laboratories
Lederle Limited
Lederle (Nigeria) Limited
Les Engrais Chimques Levis Limitee
(Levis Chemical Fertilizers Limited)
Les Engrais Chimiques Victoria Limitee
(Victoria Chemical Fertilizers Limited)
Les Engrais Saint-Gregoire Inc.
Mitsui-Cyanamid, Ltd.

Porcelain and Metal Products Limited
Prestige Perfumes International Proprietary Limited
Productora-Distribuidora Sobrino, S.A.
Ralph Dale Fertilizers Limited
Shulton (Australia) Proprietary Limited
Shulton (Far East) Private Limited
Shulton (New Zealand) Limited
Simulaser, Inc.
Skyway Fertilizers Limited
Societe Anonyme des Sutures Renodex
Societe des Aiguilles Suturex (S.A.R.L.)
Societe des Sutures Chirurgicales Robert et Carriere-Lederle
Societe Nouvelle de Distribution de Parfums Internationaux
South African Cyanamid (Proprietary) Limited
Sutumex, S.A. de C.V.
Takeda Italia Farmaceutici S.p.A.
TDF Tiofine B.V.
Tiofine (Deutschland) GmbH
Titanium Enterprises (dormant partnership)
YuHan-Cyanamid, Inc.

The following entities are subsidiaries or affiliates of petitioner Rohm & Haas Company:

Akril Istanbul
Eastern Rohm and Haas Development Center
Japan Acrylic Chemical Co., Ltd.
Modipon Limited
NosoHaas
Polytribo, Inc.
Quimica Trepic, S.A. de C.V.
Shipley Company
SumikaHaas
Tokyo Organic Chemical Industries Limited
TosoHaas
Yugocryl

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Petition for Writ of Certiorari were mailed, first class postage prepaid, this 20th day of November, 1989 to:

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